

**DRINKING WATER PROGRAM**  
**SFY 2008**  
**WEST VIRGINIA DEPARTMENT OF HEALTH AND HUMAN RESOURCES**  
**Guidance and Reporting Checklist-**  
February 2008

This Guidance and Reporting Checklist attempts to capture all of the tasks which make up a state's drinking water program. This includes all Primacy elements and other statutory requirements under the Safe Drinking Water Act, and those activities which could be funded with the DWSRF set-aside funds, Operator Certification Expense Reimbursement Grants (ERG) or the state Water Protection Coordination (Security) grants.

This Guidance captures activities for one year as the WVDHHR does not wish to develop a two-year workplan and PWSS application reflecting a two-year budget at this time.

This Guidance links the various aspects of the drinking water program to EPA's Strategic Plan goals, objectives and subobjectives. Example Outputs and Outcomes have been included, but states are encouraged to identify as many Outputs and Outcomes under the various program components as possible.

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**All reporting is considered to be via the semi-annual self-assessments, unless noted otherwise.**

New Focus Activities for SFY 2008

These are the activities which need special emphasis during the year due to their importance or due to a regulatory deadline. These are listed here to capture your attention. These activities should not reduce the focus placed on responding to acute health contaminants at all public water systems.

- X Continuation of Emergency Preparedness/Increased Security Activities with both state staff and public water suppliers, including responding to threats and emergencies.
- X New Rule Development and adoption or submission of extension requests. Implementation of new federal rules to the extent possible under state regulations and as per Extension or Early Implementation Agreements
- X State Specific Activities
- X Continuation of Operator Certification Programs and Expense Reimbursement for training
- X Continue to improve Quality Systems and documentation of these systems, including revisions to QMPs and/or QAPPs as necessary due to the adoption of new regulations.
- X Continue to improve data quality in SDWIS

**The reporting on these activities should be done in the corresponding section of the Checklists.**

**Description of Joint Evaluation Process**

The joint evaluation process will include semi-annual progress reports by the state, including the elements of 40 CFR §§ 35.115 and 31.40-41. EPA will assist the state in the development of a reporting checklist tool, completing the status of any known items for the state. The state will further complete the reporting checklist tool and submit to EPA on a semi-annual basis. EPA will review and provide feedback on these progress reports as quickly as possible. EPA will meet with the state, typically planned for mid-year timeframe, to discuss progress under the grant, any obstacles or short comings and make recommendations to the state for corrective action. EPA will provide all findings in writing to the state and may require the submission of a corrective plan by the state. In the event that resources do not allow EPA to meet with the state, e-mail and telephone discussions will take place to complete this evaluation.

Consistent with the need to be accountable for grant funds, state should identify outputs and outcomes from grant and grant related activities.

## DRINKING WATER PROGRAM GUIDANCE AND REPORTING CHECKLIST

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.

**Subobjective 1:** Water safe to drink.

**Workplan Component/Program:** PWSS

**Workyears:** 2008

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**2. Activities Required to Maintain Public Water System Supervision (PWSS) Program Primacy. See elements of 40 CFR §§142.10, 142.12, 142.14, 142.15, and 142.16.**

**Outcomes:** Implementation of an effective drinking water program as described in the workplan, increasing the knowledge and awareness of water suppliers of drinking water regulations; improved public health protection; increased public awareness of drinking water quality; achievement of compliance with drinking water regulations; measureable progress toward achievement of all outputs.

### **2.1 Data Management**

**Outputs:** Ensuring accurate and complete data related to inventory, compliance and enforcement activities are provided to EPA in a timely manner, each quarter

### **Task 2.1.1**

Participate in and follow-up to EPA **Data Verification Audit findings**. State will address major findings of the report and **report to EPA on its activities/plans to prevent future occurrences**.

**Outputs/Progress To Date** [Relationship between discrepancies from most recent DV Report (February 2006) with current Action Plan (March 2006) to address those discrepancies.]

(First part of each answer is the finding; remainder of sentence is the current status).

1. WVDHHR (State) should not delete “reporting” violations. State has had internal discussions to address this issue. Please see Future Plans section.
2. The State should determine compliance in a timely manner. The State has determined the violations through the 3<sup>rd</sup> Quarter of 2007.
3. The State should encourage systems to use labs that meet Federal Regulatory Detection Levels (RDLs). The State Regulatory Coordinator evaluates the RDLs of laboratories used by the water systems and informs appropriate OEHS personnel regarding those water systems requiring increased monitoring due to the use of labs with RDLs above the Federal limits.
4. The State should encourage District Offices to continue to update inventory information. The District Offices have been updating and continue to update inventory information as it is discovered during Sanitary Surveys or in conversations with the water systems.
5. The State should ensure that systems have sanitary surveys every 5 years or every 3 years. The District Offices have been completing and continue to complete Sanitary Surveys within the required frequency.
6. The State should ensure that systems of more than 4,900 take Total Coliform Rule (TCR) samples throughout the month, though not on the same day. Water systems and District Offices have been advised of this requirement. District Offices are checking the records during site visits to ensure that TCR samples are taken at different times of the month.
7. The State should ensure that disinfectant residual compliance calculations are completed. The SDWIS/State software program automatically performs compliance computations. Data entry over-ride procedure has been corrected. SDWIS values for MRDL computations should now be correct.
8. The State should issue a violation when a system fails to sample for chlorine residual, regardless if it sampled for TCR. State has developed a process to address this issue.

9. The State should ensure that Total Organic Carbon (TOC) compliance calculations are well-documented. State is developing a process using the web-release version of SDWIS to correct this issue.
10. The State should ensure that if maximum Maximum Residual Disinfectant Level (MRDL) is exceeded, systems will receive a violation. State has addressed this issue.
11. The State should ensure that systems monitor for Lead and Copper Rule (LCR) at correct intervals and during the summer months. The program is being implemented in its entirety.
12. The State should ensure that Surface Water Treatment Rule (SWTR) reporting failures receive Monitoring and Reporting (M/R) violations. State has addressed this issue.
13. The State should ensure that all Public Notice (PN) requirements are met or violations issued. The State is issuing violations for Public Notice non-compliance.

**Outcomes/Benefits (Lessons learned, if any)** [Discuss any proactive measures to avoid reoccurrence of discrepancies.]

Inadequate staffing in the Compliance area resulted in a number of deficiencies in the data verification report. Increased staffing and training of the staff have now progressed to a point where the findings can now be addressed.

Violations and inventory updates are reported as required to SDWIS/STATE Web Release 1 (SSWR1). The Operational Data System (ODS) reports are continually updated, and if any reporting problems occur, we notify our regional EPA office, local system administrators, and our SDWIS contractor, to resolve the situation as expediently as possible.

By notifying all personnel involved with SDWIS, we can usually resolve problems quickly.

**Future Plans** [Next review is scheduled for 2008.]

1. Violations will be issued after water systems are properly notified.
2. The State will complete all required annual violation generation by 2/15 of the following year for upload into SDWIS/ODS.
3. The State Regulatory Coordinator will continue to inform the appropriate OEHS personnel regarding those water systems that require increased monitoring as a result of using laboratories that do not meet Federal EPA guidelines regarding RDL limits.

4. The District Offices will continue to update the inventory information as they become aware of changes.
5. The District Offices will continue to complete Sanitary Surveys in accordance with Federal requirements.
6. OEHS will continue to ensure all the water systems are notified to spread TCR sampling throughout the month.
7. Chlorine Residual Data will continue to be entered into SDWIS/State in the proper manner, enabling SDWIS/State to compute proper values.
- 8., 9., 10., 11., 12. and 13. OEHS will continue to implement this program in its entirety.
14. We are developing a standardized lab reporting form. Once developed, we want all labs to report their sample analysis information on the standardized form. We believe this will help resolve issues of reporting inconsistency, and allow our data management staff to better visualize and account for the required information, and know where the information is located, each time it is sent in. The West Virginia-certified laboratories have received a copy of the standardized lab sheets for review and comment, and have sent in their responses to OEHS for further evaluation and revised implementation. We expect to incorporate the sheets as standard practice by the 2008 period.
15. We plan on continuing to work on improving our process in the future.

**Task 2.1.2** (Activity also notes statutory/regulatory citations)

Maintain a data base management system that accurately tracks the inventory (including routine updates of system information), tracks water quality monitoring information, and calculates monitoring and reporting (M/R) and maximum contaminant level (MCL) violations for all rule implementation priorities. §142.14(c)

**Outputs/Progress To Date**

OEHS recently updated from SDWIS version 8.0 to SDWIS State Web Release 1 (SSWR1). OEHS updates the system inventory information, as the systems make the changes and provide the information to our district offices. SSWR1 is used to enter, track, and review water quality monitoring (bacteriological, radiological and chemical) data. After the monitoring/sampling information is entered, SSWR1 calculates and determines the water systems' compliance with monitoring and reporting also tracks monitoring schedules and assists in development of regulatory correspondence, when needed. Appropriate violation reports are also run from SSWR1. Then OEHS notifies the system(s) of their respective violations.

### **Outcomes/Benefits (Lessons learned, if any)**

We continue to evaluate our process to receive and process monitoring/sampling information. OEHS works with our SDWIS Contractor to assist with any SDWIS problems.

### **Future Plans**

Once pilot testing is complete on the standardized lab forms, we will then implement full use to all labs certified in West Virginia (WV). We will then monitor our data entry personnel's response to the standard form, and randomly check our data to determine if productivity and quality of data entry increases.

#### **Task 2.1.3** (Activity also notes statutory/regulatory citations)

Report quarterly (within 45 days of the end of each quarter) all violations and inventory updates for all systems, and for all rule implementation priorities, to the Safe Drinking Water Information System (SDWIS)/Operational Data System (ODS) Also report any problems in reporting to SDWIS/ODS on time. §142.15(a) & (b)

### **Outputs/Progress To Date**

Violations and inventory updates are reported as required to SDWIS/ODS. If any reporting problems occur, the regional EPA office, local system administrators and the OEHS SDWIS contractor are notified in an attempt to resolve the situation as expediently as possible.

### **Outcomes/Benefits (Lessons learned, if any)**



By notifying all personnel involved with SDWIS/State and SDWIS/ODS, problems can usually be resolved quickly.

### **Future Plans**

We plan on continuing with the process and will make improvements as they become evident.

#### **Task 2.1.4** (Activity also notes statutory/regulatory citations)

SDWIS/ODS reporting includes the following activities. Particular emphasis should be placed on continuing efforts to improve data quality and reporting in the areas of Nitrate monitoring and reporting (M/R) and MCL violations; Lead and Copper Rule M/R violations; Total Coliform Rule violations and reporting of all enforcement actions.

a. Report all inventory updates with at least all of the mandatory reporting elements that determine grant eligibility. Refer to *Appendix A of the Consolidated Summary of State Reporting Requirements for the Safe Drinking Water Information System (SDWIS)* documentation, for the details on this reporting.

### **Outputs/Progress To Date**

Inventory information is entered by District Office staff, who are the individuals who primarily discover inventory changes for OEHS. OEHS uses SDWIS/State Web Version 1. Mandatory information must be entered or an error message is shown to the data entry person, in most instances. Also, when Fed Rep is used prior to upload to SDWIS/ODS, a completeness and error report will indicate additional missing data elements. All mandatory reporting elements for inventory updates are being reported.

### **Outcomes/Benefits (Lessons learned, if any)**

SDWIS/State Web Version 1 in conjunction with Fed Rep are excellent tools to use to avoid missing mandatory reporting elements that determine grant eligibility.

### **Future Plans**

OEHS will continue to input inventory updates either directly or through migration of data through a contractor-developed tablet PC field tool.

**Task 2.1.4** (Activity also notes statutory/regulatory citations)

**b.** Report all M/R, MCL, Public Notification (PN), and treatment technique violations for all rules including M/R violations for unregulated contaminant monitoring. This activity includes tracking monitoring results, and recording violations for all community water systems (CWS), non-transient non-community water systems (NTNCWS), and transient non-community water systems (TNCWS).

**Outputs/Progress To Date**

OEHS enters water system test results and reports into SDWIS/State Web Version 1 as data is received.

No sooner than ten (10) days after the end of an applicable compliance period, State personnel generate a SDWIS/State pre-compliance violations list to determine violation validity (e.g. checking items such as sample entry into SDWIS/State to verify data non-submittal by the water system). A notice of a violation letter and the appropriate Public Notice templates/requirements are mailed out to the water systems. The violations are reported to SDWIS/ODS on a calendar quarter basis after the end of each calendar quarter (i.e. February 15, May 15, August 15 and November 15).

Data is being entered into SDWIS/State Web Version 1 for all current rules. As new rules are promulgated, we train and prepare to enter any new data, as required.

OEHS converted to SDWIS State Web Release No. 1 in August 2007.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

Upon implementation of the Unregulated Contaminant Monitoring Rule Round 2 (UCMR-2), state personnel will coordinate with EPA HQ and EPA Region III for them to issue appropriate violations.

**Task 2.1.4** (Activity also notes statutory/regulatory citations)

- c. Report all formal enforcement actions and successfully link them to all appropriate violations.
- d. Report all variances and exemptions.
- e. Report all milestone information required under the regulations.
- f. Report all required SWTR data (e.g., treatment codes for all surface water, purchased surface water, GUDI and purchased GUDI sources, seller's public water system identification (PWSID) number for purchased surface water and purchased GUDI sources, filtration reason codes, etc.).

**Outputs/Progress To Date**

- c. When a formal enforcement action is levied against a water system (i.e. Administrative Order), a copy of the enforcement document is sent to appropriate OEHS personnel and Federal EPA. The enforcement actions are then linked to the violations in SDWIS/State Web Version 1.
- d. One exemption has been issued for the 7/1/07 to 12/31/07 time period.
- e. There were no 90<sup>th</sup> percentile Lead/Copper concentration exceedances or milestone status changes during the 7/1/07 to 12/31/07 time period.
- f. District Office personnel continually update SDWIS Inventory information on water systems during their Sanitary Surveys, which includes treatment codes, sources, PWSID, filtration reason codes, etc.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

- c. The work process will continue to be implemented.
- d. Future exemptions will be reported to EPA.
- e. Future lead/copper 90<sup>th</sup> percentile exceedance levels will be reported and actions taken in accordance with the Lead/Copper program, and milestone changes reported, via SDWIS/State Web Version 1 and SDWIS/ODS.
- f. District Office personnel will continue to update SDWIS/State Web Version 1 Inventory information as they acquire data during their Sanitary Surveys.

**Task 2.1.4** (Activity also notes statutory/regulatory citations)

- g. Report compliance achieved, identify and correct erroneous data, and submit deactivation data to SDWIS/ODS for all applicable systems, especially Significant Non-compliers (SNCs).

**Outputs/Progress To Date**

Any system that returns to compliance is assigned the appropriate enforcement code in SDWIS/State Web Version 1. Erroneous data that are found are corrected in a timely manner, including any unwarranted violations that were generated due to the erroneous data. The District Offices promptly enter deactivation data into SDWIS/State Web Version 1 and contact the Central Office so the accompanying monitoring schedules can also be deactivated in SDWIS/State Web Version 1 in a timely manner.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

Central Office and the District Office personnel will continue to ensure that the SDWIS/State Web Version 1 data is accurate and up-to-date.

**Task 2.1.5** (Activity also notes statutory/regulatory citations)

Plan for and make system programming changes to meet any changes to the reporting requirements that will be effective in FY 2006, FY 2007 or FY 2008 (Appendix A of Document EPA-812-B-95-001 summarizes all of the current reporting requirements.) Specifically, plan for SDWIS Modernization, new regulation reporting requirements in sufficient time to meet reporting deadlines of these new rules. Also see Implementation Guidances for each new rule for details on data management/data reporting requirements. §142.15

**Outputs/Progress To Date**

WV has been reporting via <http://cdx.ep.gov> for multiple years, which is an integral part of SDWIS modernization.

OEHS Staff review Implementation Guidance for each new rule as the guidances become available and plan for implementation of the new rules.

OEHS converted to SDWIS/State Web Version 1 in August 2007.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

OEHS tentatively plans to convert to SDWIS/State Web Release Version 2 sometime after July 1, 2008.

**Task 2.1.6** (Activity also notes statutory/regulatory citations)

Verify and ensure the accuracy of SDWIS/ODS data when SDWIS printouts are made available to the State.

**Outputs/Progress To Date**

SDWIS Reporting Services are used to review the Federal Data. Corrections are made to SDWIS/State when errors are found and are uploaded to SDWIS/ODS at the next scheduled date to correct the Federal database.

**Outcomes/Benefits (Lessons learned, if any)**

Discrepancies between State data and Federal data should decrease over time.

**Future Plans**

OEHS plans to continue the above process.

**Task 2.1.7** (Activity also notes statutory/regulatory citations)

**LCR unaddressed violations** - Update data on PWSs that received a violation for monitoring or missed milestones and do not have a follow-up action reported for compliance achieved (i.e., SOX) that is linked to the violation. §142.16(c)(4)

**Outputs/Progress To Date**

There have been no unaddressed LCR violations for the time period spanning 7/1/07 to 12/31/07.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

The LCR program will continue to be implemented in its entirety.

**Task 2.1.8** (Activity also notes statutory/regulatory citations)

Report **Public Notice (PN)** violations on a routine basis where appropriate. §142.15(a)(1)

**Outputs/Progress To Date**

199 PN violations were issued during the time period spanning 7/1/07 to 12/31/07.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

PN violations will continue to be reported and recorded in SDWIS/State.

**Task 2.1.9** (Activity also notes statutory/regulatory citations)

For **new rules**, (CCR, PN, M/DBP, LCRMR, Rads, and Arsenic) enter data into SDWIS. States not using SDWIS/State must develop the capability of reporting to SDWIS as per Extension/Implementation Agreements. For new rules which are in effect, but the state does not have Primacy, report information for EPA, Region III to make compliance determinations (see specific reporting needs in applicable Extension or Letter Agreements).

**Outputs/Progress To Date**

Data is being entered into SDWIS/State Web Version 1 for all current rules. As new rules are promulgated, OEHS trains personnel and prepares to enter any new data, as required.

OEHS has converted and trained personnel in its use.

**Outcomes/Benefits (Lessons learned, if any)**

### **Future Plans**

OEHS plans to continue the current procedure.

### **2.2 Compliance and Enforcement including Implementation of all PWSS Program Activities required by 40 C.F.R. §§142.15 & 142.16. Activities are listed by general first and then by National Primary Drinking Water Regulation (NPDWR).**

**Outputs:** Undertaking enforcement program with informal and formal actions; making compliance determinations consistent with federal regulations; developing and delivering training programs for staff and public water suppliers.

#### **Task 2.2.1** (Activity also notes statutory/regulatory citations)

Complete **Annual Compliance Report** by July 1<sup>st</sup>, for previous calendar year. Provide report to EPA Washington DC with copy to Region. SDWA Section 1414(c)

### **Outputs/Progress To Date**

The 2006 Annual Compliance Report was sent to EPA on 09/10/07. The reporting deadline for that report had been extended to 09/15/07 due to a delay in sending compliance information to the States.

### **Outcomes/Benefits (Lessons learned, if any)**

### **Future Plans**

We expect to submit the 2007 Annual Compliance Report by July 1, 2008.



**Task 2.2.2** (Activity also notes statutory/regulatory citations)

**Promote compliance with the regulations.** Notifying all systems of regulatory requirements and responding to questions (this includes CWSs, NTNCWSs and TNCWSs), taking enforcement action against recalcitrant or noncompliant systems, providing technical assistance, and issuing waivers, variances and exemptions, where appropriate.

**Outputs/Progress To Date**

1. The Compliance Officers responded to at least 408 calls between 7/1/07 to 12/31/07.
2. The following number of enforcement documents were issued: 836 notice of violation letters, 6 Administrative Orders without Penalty, 6 Food Permit Suspension Warning Letters, and 2 Food Permit Suspension Requests.
3. Compliance and Enforcement will continue to issue Food Permit Suspension Warning Letters that alert a water system to an impending enforcement action if “return to compliance” actions are not quickly implemented.
4. Compliance & Enforcement will continue to issue a warning letter 3-4 weeks prior to the end of a monitoring period reminding water systems that test results and required reports require receipt by the primacy Agency no later than ten (10) days after the end of the appropriate compliance period.
5. Approximately 1108 water systems have received their monitoring schedules from OEHS by January 31, 2007, to remind them of their upcoming sampling requirements.
6. Compliance & Enforcement has been working closely with Capacity Development to identify those water systems that have a better chance of returning to compliance with assistance or consolidation into a better managed water system than with enforcement tools.

**Outcomes/Benefits (Lessons learned, if any)**

The Food Permit Suspension Request has been extremely valuable in returning to compliance those water systems that require a food permit.

The Food Permit Suspension Warning Letters save interagency efforts to revoke a permit and appears to have the desired effect of bringing a significant number of water systems into compliance.

## **Future Plans**

1. An Administrative Order with Penalty tool is being developed to strengthen enforcement actions.
2. District Office staff will be addressing compliance issues with specific water systems in their Districts to encourage systems to correct issues that are causing violations and thus avoid enforcement actions against them.
3. Recalcitrant water systems appearing on the SNC Report will be noted on our Office of Environmental Health Services web site.
4. OEHS will continue to enhance its internal enforcement tracking system to include additional oversight actions when a water system does not respond or respond positively within specific time limits. This includes issuing Administrative Orders with Penalties.
5. Approximately 1108 water systems will receive their monitoring schedules from OEHS by January 31, 2008 to remind them of their upcoming sampling requirements.
6. In addition to the Food Permit Suspension Requests, Compliance & Enforcement will continue to issue Food Permit Suspension Warning Letters that alert a water system to an impending enforcement action if “return to compliance” actions are not quickly implemented. OEHS will continue to enlist assistance from local health departments.
7. Compliance and Enforcement will continue to develop specific tools to deal with small water associations and businesses that are chronically out of compliance.
8. Compliance and Enforcement, in conjunction with other OEHS and OLS groups, is developing the Lab Standardization Sheets to minimize test result errors and, consequently, unwarranted violations.
9. Compliance and Enforcement will continue to issue a warning letter, 3-4 weeks prior to the end of a monitoring period, reminding water system that test results and required reports require receipt by the primacy Agency no later than ten (10) days after the end of the appropriate compliance period.

**Task 2.2.3** (Activity also notes statutory/regulatory citations)

**Maintain records of pertinent State decisions** (e.g., filtration decisions, waiver determinations, public notification provisions). Report to system files all responses to M/R and MCL violations in accordance with escalation procedures as negotiated in the State Compliance Strategy. Report to system files all documentation of informal enforcement activities (e.g. NOVs or any other action with a data field in SDWIS that is not considered formal like an Admin. Order) §142.14

**Outputs/Progress To Date** [Discuss implementation of compliance strategy to address violations during reporting period]

All enforcement documents are maintained for the appropriate retention times.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

The program will continue to be implemented in its entirety.

**Task 2.2.4** (Activity also notes statutory/regulatory citations)

**Provide responses on SNC systems**, on a quarterly basis using the standard format supplied with quarterly lists, to the SDWA Branch. Work with EPA SNC Coordinator to determine why problems are occurring and take steps to correct.

**Outputs/Progress To Date**

OEHS has been working with EPA Region III SNC Coordinator on a quarterly basis to evaluate the validity of the SNC violations and to determine the best way to reduce the number of water systems on the SNC report. Enforcement tools and options have been discussed to return recalcitrant water system to compliance, including Federal and State NOVs/Administrative Orders, Food Permit Suspension Warning Letters, Food Permit Suspension Requests, and the use of other Agencies.

### **Outcomes/Benefits (Lessons learned, if any)**

The number of water systems requiring enforcement actions during the past 3 years reflects a decreasing trend (increasing compliance results). This may be attributed, in part, to (1) the development and increased use of the Food Permit Suspension Warning Letter and Food Permit Suspension Request, and (2) increased District Office and County Sanitarian “team involvement”.

### **Future Plans**

OEHS will continue to evaluate new tools and procedures to reduce the number of water systems on the SNC report.

#### **2.2.5 Government Performance and Results Act (GPRA) State Reporting Measures and Key PWSS Program Performance Indicators.**

**GPRA Measures:** Reporting is met by reporting the required quarterly SDWIS compliance data or through other reporting already done under other initiatives such as the Source Water Matrix or Wellhead Protection Program reports. For information not already reported to EPA, **reporting frequency is semi-annual.** **The following are the GPRA State Core Performance Measures and Associated Reporting Requirements:** A - EPA Region III PWSS Key Performance measures - FY’04 will serve as the baseline for the FY’07-’08 time frame. See Table in PWSS Guidance, Attachment B. Compliance with many of these measures is tracked in SDWIS. Further reporting is required for measures relating to source water protection and sanitary surveys.

#### **Task 2.2.6** (Activity also notes statutory/regulatory citations)

**SWTR:** Implement the entire rule.

**Complete GUDI determinations** for all CWS and all NCWS as per negotiated 1998 Corrective Action Plan since regulatory GUDI determination deadlines have past: CWS - June 29, 1994; NCWS - June 29, 1999. Negotiated deadlines for completing GUDI determinations: TNCs – 9/30/00; CWSs and NTNCWSs – 3/31/01

**Report** in semi-annual self assessment the number of GUDI assessments completed and expected timeframe for completion of remainder. Source type changes should be recorded in SDWIS. Deadlines to install filtration must be met.

**Give status** of %s for active/seasonal systems and unresponsive/orphan systems.

### **Outputs/Progress To Date**

Surface Water Treatment Rule was implemented in its entirety.

GUDI determinations status as of 12/31/07:

For reporting purposes, we have established 1/01/04 as a benchmark. Systems that became active or existing systems that added new sources after 1/01/04 are separated and considered new.

GUDI Status Systems (Active) Prior to 1/01/04:

Community – 100% Classification – 0 Testing

NTNC – 100% Classification – 0 Testing

NC – 100% Classification – 0 Testing

GUDI Status Systems Active After 1/01/04 to 12/31/07:

Community – 2 testing new wells, 1 new system testing

NTNC – 6 new systems testing

NC – 1 testing a new well ; 18 new system testing

**Outcomes/Benefits (Lessons learned, if any)**

OEHS's goal to achieve 100% testing and evaluations for all systems active before 1/01/04 has been completed.

**Future Plans**

New systems and sources have been and will continue to be contacted to complete testing at their earliest convenience. New systems and sources for existing systems are added to the GUDI inventory on an ongoing basis

**Task 2.2.7** (Activity also notes statutory/regulatory citations)

**TCR:** Implement the entire rule for all system types. Implementation includes: enforcing routine and repeat monitoring, making compliance determinations, conducting sanitary surveys, and reviewing sample site plans. Enforce additional routine monitoring the month following a positive sample and PN requirements.

Report the number of sample site plans reviewed, and discuss any major TCR implementation issues or problems.

**Outputs/Progress To Date**

This rule is being implemented in its entirety. Community systems have a monthly TCR compliance rate of approximately 95.5% while non-community systems have a quarterly TCR compliance rate of approximately 89.5% for this reporting period. Sample site plans are reviewed during Sanitary Surveys. See Section 2.4.1 for number of sanitary surveys (number of sample site plans reviewed are the same).

**Outcomes/Benefits (Lessons learned, if any)**

The findings indicate that: (1) community systems still are more knowledgeable about sample collection requirements and (2) a plateau appears to have been reached for both types of systems. Despite added efforts to increase compliance rates, the community/non-community 2006 compliance rates were 96% and 90%, respectively.

**Future Plans**

OEHS will continue to educate water systems on the importance of regularly monitoring for Total Coliform whenever possible.

**Task 2.2.8** (Activity also notes statutory/regulatory citations)

**Phase II and V Rule for nitrates and nitrites:** Implement the entire rule for all system types. **Implementation includes:** enforcing initial and follow up monitoring, making compliance determinations, and following up on violations.

**Outputs/Progress To Date**

This rule is being implemented in its entirety.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

The rule will continue to be implemented in its entirety.

**Task 2.2.9** (Activity also notes statutory/regulatory citations)

**Phase II and V Rule for Chronic Contaminants:** Implementation includes making compliance determinations for monitoring that has been conducted, enforcing follow-up monitoring where results are greater than the MCL, and follow-up on MCL violations. States are also encouraged to make development and implementation of waiver programs a priority implementation activity. Enforce follow-up monitoring requirements where results are less than the trigger level. Enforce initial monitoring, and enforce follow-up monitoring where results are between the trigger level and the MCL.

**Outputs/Progress To Date**

The rule is being implemented in its entirety. The standardized lab sheets (see Future Plans) have been distributed to the West Virginia-certified laboratories for their review and comment. Compliance and Enforcement has received responses and is proceeding to develop the next working steps toward implementation.

#### **Outcomes/Benefits (Lessons learned, if any)**

#### **Future Plans**

To minimize future violations of this nature, steps are being taken to implement the use of these sheets by all WV-certified labs. Each test result will be on a separate standardized sheet to ensure that sampling location/chemicals tested are easily identifiable.

#### **Task 2.2.10** (Activity also notes statutory/regulatory citations)

**Lead and Copper Rule (LCR)** including the **Minor Revisions** for all PWSs: Implement the entire rule for all systems. **Continue efforts to improve PWS's timely monitoring of lead and copper.** Enforce routine water quality parameter monitoring and additional lead and copper monitoring. Enforce public education for all systems. Report action level exceedances and milestone information to SDWIS.

#### **Outputs/Progress To Date**

The rule is being implemented in its entirety. Action level exceedances and milestone information is reported to SDWIS/ODS on a quarterly basis. The number of monitoring violations for the 7/1/07 to 12/31/07 6-month, the 2007 annual, and the 2005-2007 were 6,3, and 59, respectively. The computed compliance rates were 65%, 86% and 90%, respectively.

#### **Outcomes/Benefits (Lessons learned, if any)**



### **Future Plans**

The rule will continue to be implemented in its entirety. OEHS will supply additional training as needed.

**Task 2.2.11** (Activity also notes statutory/regulatory citations)

**Stage I DBP:** Continue implementation of the Stage 1 DBP. Ensure that systems update their monitoring plan if they change any of their sampling locations or dates.

### **Outputs/Progress To Date**

The rule is being implemented in its entirety except for the TOC compliance evaluation (See Task 2.1.1).

### **Outcomes/Benefits (Lessons learned, if any)**

### **Future Plans**

The SDWIS/State Web Release 1 Program will be evaluated to determine the accuracy of the TOC MRDL compliance evaluation.

Plan to continue evaluation of staffing levels for compliance needs.

**Task 2.2.12** (Activity also notes statutory/regulatory citations)

**Interim Enhanced Surface Water Treatment Rule (IESWTR):** Continue implementation of IESWTR. Provide a list of systems that have had a sanitary survey completed during the previous year and an annual evaluation of your state's program for conducting sanitary surveys (§142.15(c)(5)).

**Outputs/Progress To Date**

<b>PWSID</b>	<b>System Name</b>	<b>Date Completed</b>
WV3300212	City of Martinsburg	8/22/2007
WV3302502	Fairmont	10/31/2007
WV3304011	Putnam PSD	09/13/2007

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

<b>PWSID</b>	<b>System Name</b>	<b>Date To Be Completed</b>
WV3300218	Berkeley County PSD-Potomac River	01/12/2008
WV3302016	WVAWC-Kanawha Valley District	02/08/2008
WV3300516	Weirton Area Water Board	12/13/2008
WV3303516	Wheeling, City of	12/14/2008
WV3302031	St. Albans Municipal	02/06/2009
WV3301307	Lewisburg	03/08/2009

WV3300608	WVAWC-Huntington District	05/23/2009
WV3301705	Clarksburg Water Board	07/10/2009
WV3304513	WVAWC-Bluestone Plant	07/19/2009
WV3304513	WVAWC-New River Regional Water Treatment Plant	09/12/2009
WV3303111	Morgantown Utility Board	10/19/2009
WV3301905	Charles Town Water	12/13/2009 – Now >10,000/ Not last SS
WV3302835	WVAWC-Bluefield District	02/23/2010
WV3300202	Berkeley County PSD-Bunker Hill	03/07/2010
WV3302364	Logan County PSD-Northern Regional	05/08/2010
WV3304104	Beckley Water Company	06/18/2010
WV3302104	WVAWC-Weston	04/04/2010
WV3301046	WVAWC – New River Regional Water Treatment Plant	09/2009

**Task 2.2.13** (Activity also notes statutory/regulatory citations)

**Rads:** Implement the Radionuclides Rule. Work with PWS's, as needed, to ensure they are aware of their regulatory requirements. Work with the appropriate state agency to identify systems designated as "contaminated" or "vulnerable to contamination" by nuclear effluents and monitor accordingly.

### **Outputs/Progress To Date**

The rule is being implemented in its entirety including the "grandfather" evaluation which can lead to revised scheduling.

Most systems received a grandfather waiver – no sampling required until after 1/1/08. MCL and monitoring violations on non-grandfathered systems are being processed.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

Water systems will start receiving violations in 2008 if they do not have 4 consecutive quarters of monitoring in 2007, or were not on reduced monitoring beginning in 2008.

**Task 2.2.14** (Activity also notes statutory/regulatory citations)

**Arsenic:** Implement the Arsenic rule. Work with PWS's, as needed, to ensure they are aware of their regulatory requirements and can meet lower MCL effective January 22, 2006. Initiate compliance agreements with systems out of compliance.

**Outputs/Progress To Date**

The rule was implemented in its entirety including the recent 1/22/06 changes. The revised Arsenic Rule impacted 4 water systems having a combined population of approximately 843 persons. There had been one (1) MCL violation issued to a water system impacting approximately 60 people. That system installed an Arsenic removal device and has now returned to compliance.

**Outcomes/Benefits (Lessons learned, if any)** [Report positive change in population protected by new MCL achievement.]

See above

**Future Plans**

The rule will continue to be implemented in its entirety.

**Task 2.2.15** (Activity also notes statutory/regulatory citations)

**FBRR:** Review plant recycling information during sanitary surveys.

**Outputs/Progress To Date**

<b>PWSID</b>	<b>System Name</b>	<b>Date Completed</b>
WV3305104	WVAWC-Webster Springs	07/23/2007
WV3304011	Putnam PSD	09/13/2007
WV3303917	Terra Alta Water Works	10/03/2007

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

Filter Backwash Recycle records will be reviewed at appropriate water systems during Sanitary Survey inspections.

**Task 2.2.16** (Activity also notes statutory/regulatory citations)

**LT1:** Continue to implement the LT1 Rule. Inform the affected systems of their requirements under the rule and report any violations to SDWIS/ODS.

**Outputs/Progress To Date**

Monthly Operational Reports (MORs) are submitted by applicable water systems to OEHS, where the turbidity and chlorine residual data are entered into SDWIS/State on a routine basis. The turbidity data is provided to District Offices, where it is entered into the AWOP TURBOPT spreadsheet/graphing program and subsequently reviewed with systems' operators.

MORs come into data management where the turbidity data is entered into SDWIS.

**Outcomes/Benefits (Lessons learned, if any)**

Systems implemented treatment process modifications to lower furnished water turbidity to meet or exceed the LT 1 requirements. Improved water quality resulted in less public health risk.

**Future Plans**

Will continue to identify non-compliant systems, implement appropriate enforcement actions, and provide technical assistance and training as needed.

A work process is being developed to automatically generate turbidity exceedance violation letters and fully implement the program.

**Task 2.2.17** (Activity also notes statutory/regulatory citations)

**All Other Currently Regulated Chemicals:** Take enforcement actions for all arsenic MCL and M/R violations. Enforce total trihalomethane monitoring and MCL violations. Enforce current radionuclide standards. Enforce monitoring for other contaminants. Enforce against systems with other MCL violations.

**Outputs/Progress To Date**

The SDWIS State Compliance Decision System (CDS) Reports are run routinely to identify potential M/R and MCL violations. When violations are verified, NOV letters, with PN requirements, are sent to the administrative contact and violations are recorded concurrently in SDWIS/State Web Version 1, with appropriate enforcement actions electronically linked to the violation.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

Will continue to update CDS reporting and Pre-Compliance Evaluations to keep up with any regulatory revisions.

**Task 2.2.18** (Activity also notes statutory/regulatory citations)

**PN Rule:** Include public notification requirements in compliance assistance and enforcement actions that are taken on MCL, treatment technique, and M/R violations following all aspects of Revised PN Rule effective May 2002.

**Outputs/Progress To Date**

PN requirements are included with each violation letter addressing MCL, TT, and M/R violations in accordance with the PNR.

Public Notice violations are issued and recorded in SDWIS/State for failure to perform Public Notice requirements.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

The rule will continue to be implemented in its entirety.

**Task 2.2.19** (Activity also notes statutory/regulatory citations)

Revise the **State Compliance Strategy** to reflect changes in the State and Federal regulations, including revised Penalty Authorities, any new or revised State MCLs, any new SNC definitions, State procedural or organizational changes, and State/U.S. EPA Enforcement Agreements. The revisions should also include updated timely and appropriate flow charts for TCR, total trihalomethane, Radionuclides, Phase 2 and 5, SWTR, Lead Ban, and LCR violations, the CCR rule, IESWTR and DDBP rule, LCRMR, Arsenic, FBRR, LT1, and other new rules when available. The charts should trace the State's response from identification of a violation through the State's most formal enforcement tools to final compliance. §142.11

**Outputs/Progress To Date** [Revised compliance strategy.]

The State Compliance Strategy has remained consistent with last year's document.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

The State Compliance Strategy will be revised as necessary to reflect the most current regulations.



**Task 2.2.20** (Activity also notes statutory/regulatory citations)

**Screen data** submitted by public water systems for evidence of data falsification, and take **follow-up enforcement action** as appropriate.

**Outputs/Progress To Date**

Staff routinely reviews sampling and operational reports for suspicious entries, inconsistencies and omissions.

No enforcement actions were taken during this reporting period. Districts were given access to scanned MORs to review, especially those on the SNC list.

**Outcomes/Benefits (Lessons learned, if any)**

The District Office staff has the tools to more easily determine possible data falsification by comparing the water systems' data with spot data checks of their own (i.e. chlorine residual checks on specific dates).

**Future Plans**

The District Office Staff will continue to review MORs for possible data falsification and to compare the water systems' data with spot data checks of their own (i.e., chlorine residual checks on specific dates).

**Task 2.2.21** (Activity also notes statutory/regulatory citations)

**Maintain records** of tests, measurements, analyses, decisions, and determinations performed on each PWS to determine compliance with application drinking water regulations; sanitary surveys, enforcement actions, vulnerability determinations, Public Notice, etc.; make records available to the Regional Administrator upon request. §142.14

**Outputs/Progress To Date**

**Task 2.2.21** (Activity also notes statutory/regulatory citations)

**Maintain records** of tests, measurements, analyses, decisions, and determinations performed on each PWS to determine compliance with application drinking water regulations; sanitary surveys, enforcement actions, vulnerability determinations, Public Notice, etc.; make records available to the Regional Administrator upon request. §142.14

**Outputs/Progress To Date**

Hard Copy Records are maintained in Central Office, in a consolidated file system for all divisions of OEHS. Hard copy documents can be readily accessed if needed. The data in the files is purged every 3 years and archived to a location where they can be maintained for at least 12 years.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

We will be planning for the possibility of purging and archiving on a more frequent basis, or potentially moving the files to a less-compromised location for the Continuity of Operations Plan (COOP).

**Task 2.2.22** (Activity also notes statutory/regulatory citations)

**Consumer Confidence Report:** Report on implementation of the CCR Rule (§142.15, §142.16(f)). States must report violations and enforcement actions directly to SDWIS by 11/15<sup>th</sup>.

**Outputs/Progress To Date**

Violation letters and Administrative Orders were issued for late or non-submitted CCR's in accordance with the CCR Rule. Water

systems were instructed to submit their CCR certification form simultaneously with their CCR Report since a significant number of violations occurred because the water systems did not submit the certification forms by the October 1 date, even though they completed the other required actions.

CCR Reports were reviewed for timeliness and completeness. Any necessary compliance enforcement actions were taken.

#### **Outcomes/Benefits (Lessons learned, if any)**

See above

#### **Future Plans**

The rule will continue to be implemented in its entirety.

**2.2.23 Consider this a place holder for the Office of Enforcement and Compliance (OECA) reporting measures.** [As far as we know, there are no additional reporting requirements for the States. OECA primarily looks at SNCs, SNCs which have returned to compliance, and those SNCs which are Exceptions. OECA Priorities include implementation and enforcement of microbial rules and Federal enforcement of new rules]

#### **2.3 Regulation Development and Authority**

Adopt all rules on schedule as required by §142.12 and any Special Primacy requirements found at §142.16. States are strongly encouraged to adopt rules within the two years deadline to avoid a crunch in future years. Complete all primacy application packages as specified in any applicable memorandum of agreement or extension agreement. Report on any major implementation issues or problems. Apply for extension of time to adopt new regulations within two years of promulgation. Region III prefers **at least a 3 month lead time** to complete Extension Agreements by this deadline. Also see EPA Region III's Binders, mailed to each State as the Implementation Guidances become final (these contain the primacy revisions to specific rules and new primacy requirements to be added as per SDWA 1996).

**NOTE: All rule effective dates, primacy revision package/extension request dues dates are included in Appendix A of the PWSS Guidance Document.**

**Task 2.3.1** (Activity also notes statutory/regulatory citations)

**Analytical Methods Rule Changes:** Continue to implement the State rules so that these are as stringent as the analytical method changes published on December 5, 1994, March 5, 1997, December 1, 1999, May 15, 2001, October 23, 29, 2002, in the Federal Register. §142.12

**Outputs/Progress To Date**

West Virginia has adopted all federal rules in 40 CFR Part 141 by reference as promulgated by April 18, 2007, which includes all of the above analytical method rule changes.

**Outcomes/Benefits (Lessons learned, if any)**

Adopting federal rules by reference has simplified the primacy application process.

**Future Plans**

West Virginia plans to adopt all federal rules by reference, whenever feasible, as soon as practical.

**Task 2.3.2** (Activity also notes statutory/regulatory citations)

**Maintain required statutory and regulatory authorities** (those upon which primacy approval was based). Report on the status of any State reorganizations, and their effects on statutory or regulatory authorities, and on implementation.

Report on any changes to statutory, regulatory or laboratory certification status of the State Primacy Agency. §142.12

**Outputs/Progress To Date**

No changes have been made during this reporting period.

### **Outcomes/Benefits (Lessons learned, if any)**

### **Future Plans**

No changes are anticipated, other than those necessary to obtain primacy for new rules that may be promulgated.

#### **Task 2.3.3** (Activity also notes statutory/regulatory citations)

Prepare for and adopt **Ground Water Rule (GWR)**: Submit Primacy Revision Application or Extension Request to EPA by November 2008 based on November 2006 final rule promulgation. §142.12 and §142.16

### **Outputs/Progress To Date**

A proposal has been made to modify State Rules to be in conformance with the Ground Water Rule. Comments have been received from interested stakeholders.

A committee was formed to revise the State regulations to eliminate conflicts between them and the Federal GWR.

### **Outcomes/Benefits (Lessons learned, if any)**

### **Future Plans**

June 2008 – Submit proposed State Rule modifications to DHHR Liason

November 2008 – Submit EPA extension request

Spring 2009 – Approval of State Rule change by Legislature  
Fall 2009 – Submission of Primacy Application to EPA

**Task 2.3.4** (Activity also notes statutory/regulatory citations)

Prepare for **Radon Rule**. Identify systems which may have elevated levels and work with systems to reduce risk of exposure.  
§142.12

**Outputs/Progress To Date**

No activity on this task for this reporting period, based on the currently anticipated action date by EPA (2009).

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

Preparation will be implemented when 2009 is nearer.

**Task 2.3.5** (Activity also notes statutory/regulatory citations)

**Prepare for other new regulations** to be promulgated in 2006, 2007, and 2008 with State rule adoption due 2 years later;  
Specifically for LT2/Stage 2 DBP Rules, conduct early implementation activities as noted in checklists for these Rules. §142.12  
and §142.16

**Outputs/Progress To Date** [Describe implementation activities]

Stage 2 and Long-Term 2 Primacy application was submitted and interim approval granted during this reporting period. WV has sent out reminder notices about the IDSE small system and 40/30 Waivers to all affected systems and began quarterly updating Region III. District personnel are working with Schedule 3 & 4 systems in preparing IDSE plans and source water monitoring plans.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

Send reminder notices on source water monitoring to the remaining affected systems for the Long-Term 2 Rule. Begin preparing for changes as a result of the Lead & Copper short-term revisions. District Office staff will continue to work with the affected systems to maximize compliance.

**2.4 Surveillance and Technical Assistance**

**Outputs:** Report # or % sanitary surveys and other inspections/visits of water systems; permitting of drinking water facilities to assure that the design and construction of facilities will be capable of compliance with drinking water standards.

**Task 2.4.1** (Activity also notes statutory/regulatory citations)

**Maintain an adequate sanitary survey program.** Document deficiencies found in the surveys and follow-up to correct these deficiencies within the State's authority. Please provide the number of CWSs, NTNCWSs, and NCWSs which are scheduled for sanitary surveys in FYs 2006 and 2007 in the State's workplan and provide an update on the number of surveys completed. Please report on any key survey deficiencies or issues at SNC systems. §142.16

Report in semi-annual self assessment the number of sanitary surveys and the number of GUDI assessments completed and expected timeframe for completion of remainder. Give status of %s for active/seasonal systems and unresponsive/orphan systems.

Source type changes should be recorded in SDWIS Deadlines to install filtration must be met

**Outputs/Progress To Date**

**# of sanitary surveys conducted at:**

Ground Water CWS = 21

Surface or GUDI CWS = 59

NTNCWS = 17

TNCWS = 82 (Total: 179)

GUDI Assessment Status: Please refer to Section 2.2.6.

**Outcomes/Benefits (Lessons learned, if any)**



### **Future Plans**

State will conduct required number of sanitary surveys per EPA frequency guidelines as follows:

	<b>FY2008 (midyear) January 1, 2008 – June 30, 2008</b>	<b>FY 2009 (July 1, 2008 – June 30, 2009)</b>	<b>FY 2010 (July 1, 2009 – June 30, 2010)</b>
<b>CWS</b>	68	151	152
<b>NTNCWS</b>	1	17	19
<b>TNCWS</b>	36	69	109
<b>TOTALS</b>	<b>105</b>	<b>237</b>	<b>280</b>

#### **Task 2.4.2** (Activity also notes statutory/regulatory citations)

**Maintain adequate plan and specification review program** to assure that design and construction of new and modified drinking water system facilities will be capable of complying with the drinking water regulations.

Please provide an update on the number of reviews completed, or key problem areas in semi-annual self-assessment. §142.10

### **Outputs/Progress To Date**

	<b>FY 2008 Plan</b>	<b>Mid-Year FY-2008 Actual</b>
Water plan reviews (#)	450	245
Water permits issued (#)	250	163

### **Outcomes/Benefits (Lessons learned, if any)**

All newly proposed or revised community water projects are designed and issued a permit to construct facilities meeting design standards.

### **Future Plans**

OEHS will comply with state statute during the review of all design plans and issue permits for those that meet required federal and state standards.

#### **Task 2.4.3** (Activity also notes statutory/regulatory citations)

**Maintain the capability to respond to emergency circumstances and to ensure provision of potable drinking water under emergency circumstances.** Update Plans as necessary. Please report on any ongoing emergency issues in self-assessment. §142.10

### **Outputs/Progress To Date** [Describe efforts, e.g., revisions to state plan]

Central and district office staff, identified as key emergency responders, were provided with cell phones and pagers.

The Summer intern updated the OEHS emergency contact database containing emergency contact information for public water systems and local health departments.

Potable drinking water provided under emergency circumstances by using water supply storage vessels, interconnections with other public water systems and/or bottled water supplies.

Staff surveyed community public water systems and determined if pipeline interconnections exist with other public water systems.

Backup power generation capabilities have been assessed at approximately 50 percent of West Virginia's community public water systems.

### **Outcomes/Benefits (Lessons learned, if any)**

OEHS staff is able to communicate with other key responders (agency, water systems, law enforcement, and local health departments) during emergencies.

Backup water supplies can be obtained in a timely manner.

Public water systems are better prepared to utilize temporary backup power generators if and when the need for backup power generators occurs.

### **Future Plans**

OEHS will continue providing key emergency responders with cell phones and pagers.

Emergency contact lists will be updated regularly.

Summer intern will update OEHS emergency contact database, including public water systems' emergency contact information, pipeline interconnections, and backup water sources.

Maintain preparedness and assist systems with placing large potable water supply storage vessels, bottled water supplies, and determining possible emergency interconnections during emergencies.

Assist systems in setting up mutual aid agreements between drinking water providers.

Purchase special portable radios for each district office to enable emergency communications when cell phones, pagers, and conventional land line telephones are not operable.

Continue assessing backup power generation capabilities and electrical connection needs of community public water systems until all have been sized.

Continue to sponsor threat preparedness workshops for water systems operators and management.

**Task 2.4.4** (Activity also notes statutory/regulatory citations)

**Maintain documentation for and implement a Quality Management System** which includes an adequate laboratory certification program. Update the State Quality Management Plan for the PWSS Program. The State **PWSS Quality Management Plan (QMP)** documents the Standard Operating Procedures (SOP) and QA/QC requirements for the laboratory and the PWSS quality assurance systems. The QMP will include management and organization regarding QA, descriptions of technical tools of QA for all program functions including: laboratory certification and SOPs; PWS compliance, inventory and monitoring data; personnel qualifications and training, and other information. This plan is mandatory for all PWSS grant recipients and must be updated annually or as needed.

Submit additional requested documentation for conditional approved plans to make QMPs approvable.

40 C.F.R. §30.54 and 31.45 and EPA Guidance–EPA QA/R-2

**Outputs/Progress To Date**

According to Section 2.6 of EPA Guidance QA/R-2 (March 2001), plans are applicable for five years. WV QMP/QAPP was approved in 2005. WVDHHR Office of Laboratory Services (OLS) submitted a proposed revision to Office of Environmental Health Services for review in early 2006.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

Additional information will be added, joint meetings will be held with OLS and EED to discuss any contentious issues and resolve. Current goal is to finalize revisions sometime in 2010. EPA has allowed us to combine the QMP and QAPP since at least 1998 (allowable under item 1.2 in both the R-2 and R-5 documents). OEHS is proceeding under the assumption that this will continue to be the case in future submittals.

**Task 2.4.5** (Activity also notes statutory/regulatory citations)

Develop, implement and update documentation for **Quality Assurance Project Plans (QAPP)** for collection, transport and analysis of samples intended for developing information or data to be used for implementation of the PWSS Program. QAPPs are to follow EPA guidance on plan development. QAPPs are not necessary if State PWSS Program staff do not collect any samples in the implementation of the PWSS program. These plans must be updated as needed. 40 CFR §§30.54 and 31.45, EPA Guidance EPA QA/R-5. Review QAPPs of contractors.

**Outputs/Progress To Date**

See task 2.4.4

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

See task 2.4.4

**Task 2.4.6** (Activity also notes statutory/regulatory citations)

**Establish and maintain a state program for the certification of laboratories** conducting analytical measurements of drinking water; assure availability to the state of laboratory facilities certified and capable of performing analytical measurements of all contaminants.

State Lab should complete PT sample studies and repeating of any analysis that were unacceptable in make-up studies.

§142.10(b)(3) & (4) To the extent possible, place listing of labs on website.

**Outputs/Progress To Date**

West Virginia's laboratory certification for the drinking water program is located within the Office of Laboratory Services within the Bureau for Public Health. There are two divisions dealing with laboratories, environmental microbiology and environmental chemistry. The OLS Microbiological group underwent a program review in September, for both the laboratory and certification program, with no deviations reported. This group made two on site evaluations during the reporting period. The chemical group also underwent a program review, with some deviations reported, and a corrective action plan was submitted to EPA in November. One on site audit was performed during the reporting period. Proficiency testing for the chemistry group was performed in March 2007.

Environmental Chemistry (EC) has implemented an electronic database LIMS for sample log-in, tracking, approval, reporting and storage.

For EC, all PT water studies were completed in second half SFY 2007, including one make-up for manganese.

EC has gained EPA certification and/or approval for additional methods/analyses for Nitrate/Nitrite and Orthophosphate by EPA 300.0, Aluminum by 200.7, Copper by SM3111, and Mercury by 245.1.

EC has completed Initial Demonstration of Capabilities for TOC and SUVA by EPA 415.3 and has been doing compliance monitoring for PWS.

A listing of WV certified labs is on the Office of Laboratory Services' website.

EC certification officers performed an On-site Audit of an in-state commercial lab during this period and produced a report for their findings/corrections.

The Environmental Microbiology (EM) lab examined over 6,200 water samples for Total Coliform Bacteria. Of that number, almost

4,000 samples were from Public Water Systems and over 120 were from Raw Source Waters.

EM lab provided training for 2 Water Plant Operator's certification courses.

### **Outcomes/Benefits (Lessons learned, if any)**

### **Future Plans**

Consider possible additions/revisions to the State rules under CSR-64-3-13 concerning certification of laboratories.

Microbiological Laboratory plans to conduct 11 on-site evaluations of drinking water microbiology laboratories throughout the state during the next 12 months.

Proficiency Test analysis for Total Coliforms, Fecal Coliforms/*E. coli* and Heterotrophic Bacteria by methods SM9221B/E, SM9222B, SM9223B, SM9223B-QT and SM9215B should be completed within the next 3 months.

The Microbiological Laboratory is gearing up for an increase in *E. coli* samples for the LT2 Enhanced Surface Water Treatment Rule.

**Task 2.4.7** (Activity also notes statutory/regulatory citations)

**Unregulated Contaminant Monitoring Rule (UCMR)** - Carry out responsibilities under the mutually agreed upon Partnership Agreement (PA). Specifically those activities occurring in SFY 2007.

- Provide sampling and reporting assistance to those water systems performing monitoring of List 1 and List 2 contaminants;
- Ensure that each system's treatment plant location(s) as latitude and longitude is reported to SDWIS; (this is in addition to the street address);
- Assist EPA in obtaining water system compliance through follow-up contact with those systems non-complying. EPA will provide a list of such systems;
- Review monitoring data reported to SDWARS/UCMR;
- Work with Community water systems to include UCMR data in CCRs.

**Outputs/Progress To Date**

WV District personnel have worked with large systems not properly registered in SDWARS (Safe Drinking Water Accession and Review System). All systems are now properly registered.

Completed paperwork for each small system to allow the District Office to handle all sample collections for these systems.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

WV anticipates sampling at some systems to begin in early 2008, with District Office personnel encouraging/helping the affected systems collect the samples at the appropriate time.

**2.4.8 Training**



**Task 2.4.8.1** (Activity also notes statutory/regulatory citations)

Leverage both PWSS and DWSRF grant set-aside funding to **increase the amount of training** made available to operators of public water systems. Training on regulations, treatment technologies (particularly small system treatment technologies), security and public education should be stressed. **Quantitative Outputs:** Report on the type and numbers of training courses given.

**Outputs/Progress To Date**

OEHS certification training classes offered during this report period:

	<b>FY 2007 Mid-Year</b>
1D Water Operator Certification Training Classes	14
Class I Water Operator Certification Training Classes	1
Class II Water Operator Certification Training Classes	1
Class III Water Operator Training Classes	0
Water Distribution Training Classes*	2
<b>Total</b>	18

\* OEHS accepted an existing 5-day Water Distribution training course taught by the WV Environmental Training Center (WVETC) (August 6 and October 29, 2007) towards the Water Distribution certification course requirement until OEHS could develop relevant certification course and exam. See Section 3.2.1 for more information on the WD certification course and exam.

OEHS uses the 2% set-aside to provide additional training to water system operators through a sub-recipient agreement with West Virginia Rural Water Association (RWA). The additional certification courses taught by RWA are not included in above totals, but instead are listed separately in Section 3.0.1

On September 21, 2007, OEHS participated in the annual Water Festival, which consists of hands-on water-related activities with approximately 200 local 4th and 5th grade students.

Several OEHS staff presented part or all of the following CEH courses on drinking water program topics at the WV RWA annual conference September 2007:

- CAPDEV Water Class

- Water Regulations & Water Plant Operator Open Forum
- Update of the S2DBPR and the LT2ESWTR Rule
- Funding Agencies Round Table Discussions - WDA, IJDC, WVBPH, DEP & AML

**Outcomes/Benefits (Lessons learned, if any)** [# individuals training in (subject) leading to improved compliance rates and increased number of trainers]

Public Water System Operators trained during this report period:

	<b>FY 2007 Mid-Year</b>
1D Water Operator Students Trained	114
Class I Water Operator Students Trained	39
Class II Water Operator Students Trained	18
Class III Water Operator Students Trained	0
Water Distribution Students Trained*	30
<b>Total</b>	<b>201</b>

\*Not all Water Distribution course students will apply to become WD certified operators since they may already hold a higher certification that would be adequate.

Refer to Section 3.0.1 for additional information on outcomes from the 2% set-aside not included in above totals.

### **Future Plans**

Continue with current contract for Water Distribution Operator Certification Training Course development and offerings annually statewide. Please review the supplemental grants funds progress activity report for additional details on status.

Continue with current contract for Chief Operator Training Course development and offerings annually statewide. Please review the supplemental grants funds progress activity report for additional details on status.

Post current Water Operator Training Course Manuals and related information on the website.

Continue working with the WVRWA, WVETC and DWERC to enhance training opportunities for water operators.

Continue sub-recipient agreement for water operator training. Refer to section 3.0.1 for more details.

**Task 2.4.8.2** (Activity also notes statutory/regulatory citations)

**Train State and local PWSS program staff** on new and current regulations and water treatment technologies with a focus on small system treatment technology. EPA Region III will assist wherever possible.

### **Outputs/Progress To Date**

OEHS staff participated in webcasts sponsored by EPA and other organizations. Staff attended the WV Rural Water Association annual meeting.

Met with central and district office staff to facilitate implementing new aspects of 64CSR4 such as Water Distribution certification, Chief Operator training and the classification of PWSs.

Attended monthly seminars conducted to discuss SDWA and applicable rules with EED personnel.

Staff attended regional and national conferences that provided additional information on various topic areas.

### **Outcomes/Benefits (Lessons learned, if any)**

Staff became more knowledgeable and able to assist water systems more readily.

### **Future Plans**

OEHS plans to continue to encourage staff to participate in webcasts and conferences that will enhance their knowledge of current and future rules and small system technologies.

An internal staff training program is being studied.

## **2.5 Program Management**

### **Task 2.5.1** (Activity also notes statutory/regulatory citations)

Prepare DRAFT SFY 2008 and SFY 2009 grant application workplans which addresses all applicable required grant elements, and submit all required grant forms and supporting documentation. 40 C.F.R. Part 31 & 35

### **Outputs/Progress To-Date** [Submission of grant applications]

The SFY 2008 PWSS grant application was submitted to EPA in June 2007.

### **Outcomes/Benefits (Lessons learned, if any)**

OEHS will fund its programs to protect public health regarding drinking water standards.

### **Future Plans**

SFY 2009 PWSS grant application will be prepared early in 2008 for submittal to EPA.

**Task 2.5.2** (Activity also notes statutory/regulatory citations)

**Prepare and submit** a final FY 2007 and FY 2008 grant application which addresses all Region III comments on the preliminary draft plan, including all budget documentation and supporting information. 40 C.F.R. Part 31 & 35 Consider two-year applications.

**Outputs/Progress To Date** [ Submission of grant applications]

Final PWSS SFY 2008 grant application was submitted to EPA June 2007. Questions and comments are addressed as soon as possible.

**Outcomes/Benefits (Lessons learned, if any)**

OEHS will fund its programs to protect public health regarding drinking water standards .

**Future Plans**

Final PWSS SFY 2009 grant application will be submitted to EPA early in 2008. Any questions and comments will be addressed as soon as possible.

**Task 2.5.3** (Activity also notes statutory/regulatory citations)

**Prepare and submit** a semi-annual self assessment which reports State progress in meeting State program plan commitments to the Region. Entails reporting on all activities as identified in the work plan including those performed by the recipient, by contractors and through interagency agreements. **Self assessment shall include:** a progress summary, justification for any outputs not submitted in accordance with the agreed upon schedule, and a discussion of anticipated program problems in the upcoming quarter(s). The first status report should contain a listing of each milestone (output) and their schedule completion dates for all proposals.

It is expected that this document will also serve as a reporting tool. 40 C.F.R. §31.40 and §142.15

**Outputs/Progress To Date** [Submission of 2 semi-annual progress reports in SFY2007]

This report is the semi-annual report for the first half of SFY 2008. It contains outputs and outcomes as proposed in the workplan.

**Outcomes/Benefits (Lessons learned, if any)**

The semi-annual report provides a tracking system for completion of proposed activities. Periodic reporting brings focus to activities completed and attention to activities not yet completed.

**Future Plans**

The PWSS End-of-Year report for SFY 2008 will be submitted to EPA by August 15, 2008.

**Task 2.5.4** (Activity also notes statutory/regulatory citations)

All **changes to the approved work plan** must be discussed with the EPA State Program Manager prior to making the change in order to determine if this is a *significant program change* requiring an amendment or other written documentation for the grant award. 40 CFR Part 31 & 35

**Outputs/Progress To Date**

There were no proposed changes to the PWSS workplan.

**Outcomes/Benefits (Lessons learned, if any)**

Discussion and approval from EPA ensures that our program activities remain consistent and in compliance with the SDWA.

**Future Plans**

Any subsequent changes to workplans will be submitted to EPA for proper approval.

**Task 2.5.5** (Activity also notes statutory/regulatory citations)

Provide a **Final Financial Status Report (FSR)** documenting SFY 2007 expenditures within 90 days of end of budget period. If State elects to apply for a two year budget and project period, SFY 2007 FSR will be an interim submittal. 40 C.F.R. Part 31

**Outputs/Progress To Date** [Submission of FSR for SFY 2007]

Financial Status Report (FSR) was sent to EPA on 09/10/07. This was the only FSR that was required during this period.

**Outcomes/Benefits (Lessons learned, if any)**

**Future Plans**

State will continue to submit FSRs as required.

**Task 2.5.6** (Activity also notes statutory/regulatory citations)

**Maintain records as per §142.14**

**Outputs/Progress To Date**

Please refer to Section 2.2.21 for information on this task.

**Outcomes/Benefits (Lessons learned, if any)**

Please refer to Section 2.2.21 for information on this task.

**Future Plans**

Please refer to Section 2.2.21 for information on this task.

**End of info for PWSS Workplan, although option items #4 and #5 could be listed as well for state to choose from and for tracking purposes.**



### **3 Activities Required to Receive Drinking Water State Revolving Loan Fund (DWSRF) Program Allocation**

**Note:** Section 3 is included in this Generic Program Guidance for additional background information and to help describe the full breadth of the SDWA programs. If any state activity to meet requirements outlined here in Section 3 are funded under the DWSRF set-aside funds, they should NOT appear in the PWSS Program grant workplan. See additional National and Regional Guidance for more details on DWSRF applications/workplans.

**The activities under Sections 3.0 General Provisions, 3.1 Capacity Development, and 3.2 Operator Certification are required to receive the entire DWSRF Program Allocation.** The activities under Section 3.3 Source Water Protection, are not required to receive DWSRF funds. However, if the State wishes to adopt alternative monitoring requirements, the State must have an approved source water protection program, and the State can use DWSRF funds to conduct source water assessments.

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.

**Subobjective 1:** Water safe to drink.

### 3.0 General Provisions

State is required to prepare a plan that identifies the intended uses of the amounts available to the DWSRF Program annually, including Set-aside funds. SDWA 1452(b)(1)

This portion of the Checklist should be used to capture the 2%, 10% and 15% Set-aside funded activities only. The 4% Administrative set-aside and the loan portion of the program are handled by the MFAB at EPA Region 3 and as such, as not covered here unless specifically identified. **A few reminders:** State must (1) prepare a plan that identifies the intended uses of the amounts available to the DWSRF Program, annually, SDWA 1452(b)(1); (2) Develop and publish a list of prioritized projects in the State that are eligible for funding. The State should develop an overall priority list, as well as a list of projects to be funded in the coming year, SDWA 1452(b)(3)(B) and page 9-11 of the February 28, 1997 final DWSRF Guidance; (3) Review all Significant Non-compliers and list of chronic non-compliers before providing a loan, SDWA 1452(a)(3)(C); (4) Prepare and submit a report to U.S. EPA every 2 years on the State's activities in administering the DWSRF Program, including the findings of the most recent annual audits of the fund conducted by the State. SDWA 1452(g)(4), and page 45 of the February 28, 1997 final DWSRF Guidelines; and (5) provide semi-annual progress reports on Set-aside funded activities.

**Outputs** are as noted below with each set-aside. **NOTE:** State is required to give "detailed" narrative of work being performed and on the "progress" being made under each funded set-aside. Listing activities in one or two sentences does not give a complete picture. State's narrative should tell a story, connecting the information from previous reports to current. EPA also suggests including numbers where ever it is feasible ( e.g. # of courses held) and discuss results or effectiveness of activities being performed. Report on expenditures for Set-aside funded activities will be submitted annually in the DWSRF progress report submitted to the Office of Infrastructure and Assistance.

**Outcomes** are improved operational and/or financial efficiency; improved compliance with NPDWR for systems receiving technical assistance or improved operator performance; attainment of Primacy for new rules (for states using program funds for this purpose); improved data quality (for states using program funds for this purpose); reduced treatment expenses for water systems due to source water protection efforts; improved customer and stakeholder satisfaction; improved efficiency through consolidation or regionalization.

**Task 3.0.1: Technical Assistance 2% Set-aside** [Relationship to On-going Program: Improve understanding of the contribution of set-aside funded activities in supporting other aspects of the State drinking water and ground water programs]

**Goal 1:** Administer the technical assistance program to provide training, enhance public education regarding water issues, and promote long-term viability of small water systems.

**2008 Workplan Quantitative Outputs:** Refer to Outputs listed below.

**Outputs/Progress To-Date** [Refer to 2% Set-aside **Objectives under Goal** in DWSRF workplan]

<b>Proposed for Entire Year</b>	<b>Actual Mid-Year Status</b>
50+ days of continuing education training at regional locations.	31 days of training provided during this report period. In addition, 15 days of certification training was provided.
Educational audio/visual aids developed for water system operators.	A sampling video script is currently being developed.
Course manuals and study guides (e.g. math, chemistry) developed and revised to assist water operator training needs.	A Basic Math Handbook for Class I and II water operators was developed Fall 2007. The Class I water operator course manual was also revised Fall 2007. The Class II water operator course manual is currently being developed (approximately half-way complete).
Exam Database maintenance (for class schedules, operator attendance, and certificate completions information).	A database with class schedules, operator attendance, and certificate completions is being maintained.
Drinking water library of written resources and videos maintained for water system operators.	A lending library for audio/visual instructional and informational materials on industry subjects is being maintained. Lending library materials are free of charge to West Virginia water system personnel.
Website available and maintained with water operator resources.	WV RWA maintained its website library at the following link: <a href="http://www.wvrwa.org/infocentral/library/library.htm">http://www.wvrwa.org/infocentral/library/library.htm</a> . The homepage allows instantaneous updates on training, schedules, audio/visual items, posting of training materials, and the sharing of general information related to drinking water.
Approved annual budget and work plan.	WV RWA budget and work plan was approved and effective November 1, 2007 through October 31, 2008.
Monthly activity report detailing classes conducted, water system and operator attendance, time diaries, and expenses submitted monthly.	WV RWA provides OEHS with monthly reports on these activities. A comprehensive annual report for Hours for Education and Learning Program (HELP) was also issued. OEHS reviews both the financial and program activities in these reports.
Articles published in trade magazines.	WV RWA <i>Mountain State Water Line</i> magazine issued Fall of 2007.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]. Evaluate the success of work funded by the DWSRF set-asides.

OEHS believes that the RWA contract for this 2% set-aside is an effective use of EPA funds to provide water operator training and meet their certification requirements. Classes taught directly relate to water system operation, which helps ensure compliance with the SDWA and is supportive of the set-aside outcomes.

OEHS requested input from WV RWA regarding the development of a process to determine the effectiveness of the program in addressing SDWA issues last fall (2007).

#### **Future Plans**

Complete the process to determine program effectiveness in addressing SDWA issues.

Plan to have at least another 20 days of CEH training to reach goal of 50+ total days.

Plans are in place to meet the proposed work plan training activities using Rural Water Association through the sub-recipient agreement. Develop a new sub-recipient agreement continuing education work plan with Rural Water Association to be effective November 1, 2008. OEHS will continue to monitor activities and recommend class changes based on operator needs.

Continue to work closely with RWA to assure timely completion of deliverables in current contract.

**Task 3.0.2: Program Management 10% Set-aside** [Relationship to On-going Program: Improve understanding of the contribution of set-aside funded activities in supporting other aspects of the State drinking water and ground water programs]

**Goals to match the current DWSRF Workplan**

**2008 Workplan Quantitative Outputs:** 100+ sanitary surveys; 5-10/yr back flow tester courses; 30-50/yr cross connection and back flow prevention plans distributed

**Outputs/Progress To Date** [Refer to 10% Set-aside **Objectives under Goals 1-5** in DWSRF workplan]

**Goal 1:** Support PWSS Program

<b>Proposed for Entire Year</b>	<b>Actual Mid-Year Status</b>
Training conducted for State personnel implementing and enforcing new rules.	See Task 2.4.8.2 for status.
Training conducted for public water system personnel complying with new rules	See Task 4.9 for status.
Violations and/or administrative orders issued for failure to comply with SDWA rules	See Task 2.2.2 for current status.
State legislature approval obtained for revised state rules	Revisions to 64CSR4 (Public Water System Operator Regulations) were submitted for approval by State Legislature during 2007 session and became effective April 18, 2007.
SDWA regulations primacy maintained.	Primacy maintained for all rules as of December 31, 2007.
Public Water System Operator Regulations adopted and implemented	There were no changes during this reporting period.
Reports completed accurately and promptly	All reports submitted promptly and accurately as of December 31, 2007.
Concerns or deficiencies identified in the EPA Performance Evaluation Report addressed concerns or deficiencies.	EPA PER concerns were addressed and completed during the first half of SFY 2008.

100+ sanitary surveys conducted each year	See Task 2.4.1 for current status.
District staff reviews permits and plans within requested timeframe	See Task 2.4.2 for current status.
District staff recommendations made to improve water system operations and correct deficiencies	See Task 4.6 for current status.
Complaints investigated promptly	Complaints are investigated as soon as possible after receipt.
Technical assistance provided to water systems	Technical assistance is provided on next visit to area.
Operators throughout the state receive cross-connection control training	See Task 7.3 for current status.
Cross-connection and back flow prevention plans distributed as requested (30-50/year expected)	See Task 4.3 for current status.
Adequate training provided at all water operator courses/back flow tester courses (approximately 5-10/year)	See Task 7.3 for status.

**Goal 2:** Effective use of SDWIS

<b>Proposed for Entire Year</b>	<b>Actual Mid-Year Status</b>
Identified errors reduced from the local and federal diagnostic reports	No comparisons have been done during this reporting period.
SDWIS becomes a more accurate data tool.	SDWIS data accuracy is directly dependent on the input accuracy of Data Management (DM) team members. Their accuracy is directly correlated with their knowledge and experience, which is increasing. Through quality control, the accuracy should improve.  A Data Management Committee (DMC) has been established and meets monthly to address SDWIS and related data. Data entry protocols were developed and communicated to all individuals entering operator information in Legal Entities of SDWIS during Fall 2007. This will improve consistency and overall data quality as well as facilitate future operator data queries.
The number of preliminary violations approaches the number of	An evaluation of Preliminary Violations and Final Violations for

final violations	CY 2007 has been done.
Contractor maintains SDWIS Database	Contract was renewed for the current FY and continues to work with EED for production improvements.
Number of certified laboratories submitting data electronically increased	NODE testing has not been successful as of 12/31/07. No progress to date.
Data exchange improves SDWIS accuracy.	The Node and Data Exchange are not functional as of 12/31/07.
Data entry staff focus shifted to data analysis	We have been spot checking data entries to perform data analysis. We are also performing Pre-Compliance checks prior to issuing violations to our public water systems. The Pre-Compliance checks are used as a Quality Assurance and data analysis tools.

**Goal 3:** Improve water system operators' knowledge, skills, and abilities maximizing public health protection, compliance, and system operation efficiency

<b>Proposed for Entire Year</b>	<b>Actual Mid-Year Status</b>
Coalition members provided direction for water operator training.	The Coalition did not meet during this reporting period.
Water Operator Certification program compliant with SDWA	Operator Certification Program approved by EPA September 28, 2007. See Section 3.2.1 for status.
Certificates issued for each completed course.	CEH course instructors are required and reminded to provide all course participants with certificates that include CEH number, course name and number of hours as approved.
Maintained operator continuing education requirements and completed courses for certification renewal.	Each operator must submit appropriate CEH documentation as part of renewal requirements using form EW-102D. This information must then be entered in the SWOCS database to process a renewal.
Maintained approximately 4,000 water operator certifications	The total number of water operator certifications was overestimated in the approved DWSRF workplan. There are approximately 2,300 total water operator certifications currently. See Task 3.2.1 for status.
Submitted continuing education courses reviewed and approved or rejected.	The CEH committee schedules monthly meetings, discusses pending course applications, and makes approval/rejection

	decisions on all continuing education hour applications. Prior to the monthly meetings, the application is circulated to all the committee members and sent to WV Drinking Water Education and Training Coalition members for review and comment. This circulation and comment period typically takes between two and four weeks. See Task 3.2.1 for more details.
Random exams generated from the database.	The Drinking Water Exam Review Committee (DWERC) has decided against a random exam generating database or software. DWERC prefers to have additional time to review each final exam version to verify it follows identified content areas and Need-to-Know criteria as a whole. OEHS is working with the DWERC to develop two fully validated versions of each operator classification exam. Any extra questions developed will be put into a test bank for future exam revisions or editions. See Task 3.2.1 for additional status information.
Provide required certification courses and exams annually.	See Task 2.4.8.1 for status.
Training aids, equipment, study guides, and reference materials available.	Currently working on revising training course manuals, reference lists, and content area outlines in-house and with assistance from Task 3.0.1 Technical Assistance 2% Set-aside projects. Once developed, all resources will be posted to OEHS website and provided as hardcopies in related training courses.
Information distributed to water operators.	Drips & Drops newsletter provided at least bi-annually to all water operators. Website reviewed and revised continually as new information becomes available.
Operators trained in regulatory changes and best practices.	New regulatory and best practices information is included in all operator training courses as it becomes available. For example, all operators were informed of revisions to the operator regulations as part of Class I and II water operator courses and a WV RWA annual conference CEH course this Fall 2007.
Outstanding water operators recognized.	Continue to participate with nominations for American Water Works Association (AWWA) and US EPA awards. John Inghram with Putnam County PSD received the large system, Operator Excellence Award for EPA Region III on August 23, 2007.



Training and testing procedures modified to reflect actual job activities.	As part of Drinking Water Exam Review Committee, all certification exams and courses are reviewed and revised continuously. See Task 3.2.1 for additional status information.
Meet EPA operator certification requirements.	EPA requirements are continuing to be met. The WV Operator Certification and Training Program annual report was approved by EPA on Sept 28, 2007. No operator certifications were suspended or revoked during this reporting period. Three Administrative Orders contained violations related to not having a properly certified operator.

**Goal 4:** Support the Interstate Commission on the Potomac River Basin

<b>Proposed for Entire Year</b>	<b>Actual Mid-Year Status</b>
ICPRB activities protected shared drinking water sources.	Participated in and provide funding for the Potomac Drinking Water Source Protection Partnership through the ICPRB. This partnership is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Potomac River basin.

**Goal 5:** Oversee and manage the remaining set-aside fund

<b>Proposed for Entire Year</b>	<b>Actual Mid-Year Status</b>
All grants used effectively.	Please review the supplemental grants funds progress activity report for details on status.
Completed evaluation reports used for subsequent projects.	Please review the supplemental grants funds progress activity report for details on status.
An effective GIS database developed for water systems.	Please review the supplemental grants funds progress activity report for details on status.
Source water protection activities implemented.	Grants Program for Surface Water Systems. Please review the supplemental grants funds progress activity report for additional details on status.

Source water protection plans improved.	Grants Program for Surface Water Systems. Please review the supplemental grants funds progress activity report for additional details on status.
A contract established helping water systems achieve TMF capacity.	Please review the supplemental grants funds progress activity report for details on status.
TMF capacity and system needs identified through surveys.	Please review the supplemental grants funds progress activity report for details on status.
Contractor documented activities and progress reviewed.	Please review the supplemental grants funds progress activity report for details on status.
Source water protection activities implemented.	Contractor Program to implement wellhead source water protection activities. Please review the supplemental grants funds progress activity report for additional details on status.
Source water protection plans improved.	Contractor Program to implement wellhead source water protection activities. Please review the supplemental grants funds progress activity report for additional details on status.
Water systems facilities will have increased security.	Please review the supplemental grants funds progress activity report for details on status.
All funds used effectively.	Please review the supplemental grants funds progress activity report for details on status.
Water system's operators received PBT and AWOP mentoring for 18 months.	Please review the supplemental grants funds progress activity report for details on status.
PBT program water system operator graduation rates increased.	Please review the supplemental grants funds progress activity report for details on status.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes] Evaluate the success of work funded by the DWSRF set-asides.

See the outcomes listed in the DWSRF FFY2007 Workplan.

### **Future Plans**

Backflow prevention assembly tester courses will be supported through outside contracts.

Data regarding preliminary and final violations is available and comparisons will be made in future reports.

**Task 3.0.3: Local Assistance & Other Activities 15% Set-aside** [Relationship to On-going Program: Improve understanding of the contribution of set-aside funded activities in supporting other aspects of the State drinking water and ground water programs]

**Goals to match the current DWSRF Workplan**

**2008 Workplan Quantitative Output:** 20 or more on-site CDAs.

**Outputs/Progress To Date** [Refer to 15% Set-aside **Objectives under Goals 1-2** in DWSRF workplan]

**Goal 1:** Improve drinking water system viability through continued capacity development program strategy implementation

Proposed for Entire Year	SFY Status
20 or more on-site CDAs conducted annually.	See Task 3.1.2.1 for current status.
New water systems should attain managerial, financial, and technical capacity.	One system was processed from an application received late in FY2007. Four applications for new systems have been received during the first half of FY2008. Two have been reviewed and permits issued. Two reviews are pending waiting on requested

	additional information.
Report issued for each assessment.	See Task 3.1.2.1 for current status.
Reference materials and assistance provided to water systems.	Reference materials distributed at WVPSC training, conferences, assessments and CAPDEV meetings. Conducted one CAPDEV meeting, maintained CAPDEV webpage, and had a booth and provided training at the Rural Water Conference.
Contact with each system after assessment to monitor improvements.	OEHS had telephone follow-up after each assessment. OEHS also provided significant follow-up assistance to 10 water systems.
Assistance provided to receptive water systems.	Provided five direct, on-site assistance water system assistance visits and provided daily telephone assistance.
Water system assessment questionnaire completed.	Questionnaires have been completed for each assessment.
Water system baseline ranking list generated.	Baseline ranking list is not scheduled until 2008.
Baseline assessment completed every three years.	Baseline assessment is not scheduled until 2008.
Assessed water systems will have a higher capacity increase over the remaining systems.	The most recent baseline trends indicate that assessed systems have improved capacity versus unassessed systems.
Annual program report summarizing activities.	Annual report was issued in November 2007.
Governor's report every three years.	Governor's report is scheduled for September 2008.
§1420(b)(1) SNC list every three years.	SNC list was completed in July 2006.
Financial and managerial seminars presented at Public Service Commission training and WVRWA conference.	WVPSC board member training was conducted in September 2007. Capital Planning/Asset Management training was provided in the August 2007 WVPSC Manager's Seminar. OEHS presented several seminars, including on the New England Environmental Finance Center's <u>25 Questions Evaluating Your Water System's Financial Capacity</u> , at the WVRWA conference (in September 2007). A CAPDEV meeting was held at the beginning of the WVRWA conference.
Financial and managerial capacity including funding recommendation regarding potential loan recipients communicated to DWTRF staff.	Three (3) water systems were assessed and were recommended for DWTRF funding.
Annual calendar produced and distributed.	Calendars were produced and 2,000 are being printed. Upon receipt calendars will be distributed to water systems. The calendar contains upcoming continuing education courses for operators.

Cooperative agreements among water systems creating improved capabilities.	Meetings allow interaction and network time among water systems. Meetings are informal to encourage uninhibited discussion of issues and concerns from the water systems. No written agreements so far.
TMF tools and information disseminated.	Various handouts (CIP booklets, magazine articles, etc.) were provided all attendees. Drinking water operators awarded 2 hours of Continuing Education for participating in the CAPDEV meetings.
Written meeting summaries compiled and distributed.	Agendas, attendees list and discussions are posted on CAPDEV page of the OEHS website.
Quarterly meetings held throughout the state.	A meeting was held on September 9, 2007 at Snowshoe, WV during the Rural Water Conference. We are considering changing the quarterly meetings to twice yearly. Additional meetings will be conducted if drinking water systems request more frequent meetings.
Drinking water information communicated to the public.	The OEHS <i>Drips and Drops Newsletter</i> was issued in November 2007.

**Goal 2:** Protect source water from future contamination through Source Water Assessment and Protection (SWAP) and Wellhead Protection (WHP) programs.

<b>Proposed for Entire Year</b>	<b>Actual Mid-Year Status</b>
Local efforts create enhanced protection plans.	Developing grants and contracts to promote source water protection concepts at the local level. See Section 3.3.0 and Appendix E for status.
Standardized plans are accessible for interested parties.	Development of a secure website that will provide the wellhead and source water areas, location of public supply wells and potential contaminant sources for use by other utilities, state, emergency management, and federal agencies. An interagency agreement has been signed with the West Virginia State GIS Technical Center and the secure website is currently being developed.

	Work continues on placing the community source water assessment reports on the WV DHHR web site to provide wellhead and source water areas, potential contaminant sources and susceptibility analysis for use by other utilities, state, emergency management and federal agencies.
Approved SWAP and WHP plans are developed and used.	Continue to update the source water protection-tracking database, revisions, protection activities and enhancements to the SWAP/WHP assessments (implemented and/or have substantial implementation status determination) are entered into this database.
Source water information presented at relevant conferences and meetings.	See Section 3.3.0 Public Outreach/Educational Activities for status.
Initial and updated source water reports are completed and used.	Continue to update the source water protection-tracking database, revisions, protection activities and enhancements to the SWAP/WHP assessments (implemented and/or have substantial implementation status determination) are entered into this database.
New assessments and revisions are completed.	Continue to update the source water protection-tracking database, revisions, protection activities and enhancements to the SWAP/WHP assessments (implemented and/or have substantial implementation status determination) are entered into this database.
Informational materials distributed to assist local source water protection efforts.	See Section 3.3.0 Public Outreach/Educational Activities for status.
Sources classified as GUDI or not-GUDI.	See Section 2.2.6 for status.
Correspondence describing treatment requirements based on GUDI designation.	See Section 2.2.6 for status.
Information and ideas exchanged.	Sponsor or co-sponsor a Water Protection conference in 2008.
Continuing education credit for water plant operators, sanitarians, and professional engineers.	Sponsor or co-sponsor a Water Protection conference in 2008.
Conference proceedings are recorded and available.	Sponsor or co-sponsor a Water Protection conference in 2008.
Inspection and inventory data transferred between agencies.	WV DHHR continues to fund the DEP class V UIC program. The DEP UIC Class V program inspected 111 sites with 53 sites requiring corrective actions, such as plugging floor drains.

Quarterly report summarizing program activities sent to OEHS.	WV DHHR continues to receive a quarterly report summarizing UIC activities.
High quality maps produced.	GIS continues to be used to prepare maps; displaying geographic, geologic and monitoring data in support of source water/wellhead protection. GIS is a fundamental tool used to support the delineations, inventories and susceptibility analyses required by the Source Water Assessment Program.
Accurate location information is available from GPS data.	Staff continues to receive Global Positioning System (GPS) data associated with the public wells and correct when necessary.
Spatially related data used for source water protection and SDWIS.	GIS continues to use the spatially related data to prepare maps; displaying geographic, geologic and monitoring data in support of source water/wellhead protection.

**Goal 3:** Provide oversight and management of remaining set-aside funds

<b>Proposed for Entire Year</b>	<b>Actual Mid-Year Status</b>
Offer technical assistance grants to private and public community water systems. Offer planning and design grants to private and public community water systems.	Please review the supplemental grants funds progress activity report for details on status.
Award and monitor grant work	Please review the supplemental grants funds progress activity report for details on status.
Review and reimburse eligible costs	Please review the supplemental grants funds progress activity report for details on status.
Review project report and final payment request	Please review the supplemental grants funds progress activity report for details on status.
This grant creates a comprehensive Global Position System (GPS) inventory of water system infrastructure. Build comprehensive Geographic Information System (GIS) mapping for public water systems. Enable municipalities and PSDs to analyze GIS data for their respective systems.	Please review the supplemental grants funds progress activity report for details on status.
An effective GIS database developed for water systems	Please review the supplemental grants funds progress activity

	report for details on status.
Provide grants to groundwater community PWSs to establish and implement source water protection programs	Please review the supplemental grants funds progress activity report for details on status.
Source water protection activities implemented	Grants Program Groundwater Systems. Please review the supplemental grants funds progress activity report for details on status.
Source water protection plans improved	Grants Program Groundwater Systems. Please review the supplemental grants funds progress activity report for details on status.
A contract established helping water systems achieve TMF capacity	Please review the supplemental grants funds progress activity report for details on status.
TMF capacity and system needs identified through surveys	Please review the supplemental grants funds progress activity report for details on status.
Contractor documented activities and progress reviewed	Please review the supplemental grants funds progress activity report for details on status.
Source water protection activities implemented	Contractor Program to implement wellhead source water protection activities. Please review the supplemental grants funds progress activity report for details on status.
Source water protection plans improved	Contractor Program to implement wellhead source water protection activities. Please review the supplemental grants funds progress activity report for details on status.
A complete UMI course curriculum is developed and available for use	Please review the supplemental grants funds progress activity report for details on status.
All funds used effectively	Please review the supplemental grants funds progress activity report for details on status.
Water systems' operators received PBT and AWOP mentoring for 18 months	Please review the supplemental grants funds progress activity report for details on status.
PBT program water system operator graduation rates increased	Please review the supplemental grants funds progress activity report for details on status.



**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes] Evaluate the success of work funded by the DWSRF set-asides.

See the outcomes listed in the DWSRF FFY 2007 Workplan.

### **Future Plans**

Third round of WHP grants are scheduled to be selected during 2008/2009.

Recently lost a CDA staff member due to a transfer and have posted the open position for a replacement. At current staffing, OEHS plans to complete 18 CDA's for SFY2008. CAPDEV will provide increased follow-up assistance with water systems receiving CDA's.

### **3.1 Capacity Development**

**Background Notes:** The State had until September 30, 1999 to obtain legal authority or other means to ensure that all new CWSs and new NTNCWSs that commence operation after October 1, 1999, demonstrate technical, managerial, and financial (TMF) capacity with respect to the NPDWRs. Twenty percent of a State's allotment would have been withheld beginning October 1, 1999 for FY'00 funds. In the fiscal years following a state's initial documentation of a fully functional program, a state must document that it is requiring a demonstration of technical, managerial, and financial capacity by every new CWS and every new NTNCWS to avoid withholding of 20% of its DWSRF allotment. 1452(a)(1)(G)(i) and 1420 (a), and page 15 of the February 28, 1997 DWSRF Guidelines.

The State had until August 6, 2000 to develop and begin implementing a strategy to assist existing PWSs in acquiring and maintaining technical, managerial, and financial capacity, otherwise 10% of the FY '01 DWSRF funds allocated to the State would have been withheld. In the fiscal years following a state's initial documentation of a fully functional program, a state must document that it is implementing its strategy to avoid withholding of 20% of its FY'03 DWSRF allotment and in each subsequent year. 1452(a)(1)(G)(i) and 1420 (c), and page 16 of the February 28, 1997 DWSRF Guidelines.

#### **3.1.1 Capacity Development Authority (New Systems)** SDWA Section 1420

The state's program will be evaluated annually as of October 1<sup>st</sup>. The withholding occurs at the time of the DWSRF award for those FY funds.

#### **Task 3.1.1.1**

Annual Review and Reporting on New Systems Demonstration of TMF: A state must document that it is requiring a demonstration of technical, managerial, and financial capacity by every new CWS and every new NTNCWS.

Documentation could consist of summary statistics regarding the number of new CWSs and NTNCWSs and the results of their required capacity demonstrations. Documentation should also address methods used to evaluate and verify program implementation.

**Each semi-annual progress report should include:** (1) The # and list of approved new CWSs and NTNCWSs; (2) Compliance status of new CWSs and NTNCWSs that commenced operation after 10/1/99.

See Appendix D "U.S. EPA Region III Reporting Criteria for Annual State Capacity Development Program Implementation Report." The Attachment describes the reporting criteria for the Report.

#### **Outputs/Progress To Date** [1 Annual Capacity Development Program Implementation Report (due by 11/30<sup>th</sup> each year)]

Capacity Development Program (CDP) Annual Report was completed and submitted to EPA Region 3 by 11/30/07. New systems program status was provided in the annual report.

#### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

The greatest single impact of the new systems program has been many new water systems either are or will be operated by an existing system or connect to an existing system. As noted in the CDP Annual Report, nine of the 17 new systems we are tracking (more than 50%) have made this choice. Our permitting system is eliminating or consolidating new systems where practical. However, several, active, stand alone systems have had difficulty understanding and implementing required monitoring. We have continued implementing plans mid-year to address this problem. The CDP is providing increased, more pro-active new system monitoring requirement, education, and guidance (intended to address the problem identified in the outcomes).

### **Future Plans**

The CDP Annual Report will be issued by November 30, 2008. It will evaluate the on-going impact of the new systems program (overall) and the increased new system education and guidance.

#### **3.1.2 Capacity Development Strategy (Existing Systems)**

1452(a)(1)(G)(i) and 1420 (c), and page 16 of the February 28, 1997 DWSRF Guidelines. **Background Notes:** A state must document that it is implementing its strategy to avoid withholding of 20% of its DWSRF allotment in subsequent years.

##### **Task 3.1.2.1**

**Annual Review and Reporting** for Existing Systems implementation: **Each year, as a stand-alone submittal; as part of the semi-annual self assessment; or as part of the state's capitalization grant application**, the state must provide documentation showing the ongoing implementation of their capacity development strategy. **Such documentation may consist of** a concise narrative description of the major activities being conducted and planned for under the state's capacity development strategy.

##### **Outputs/Progress To Date** [1 Annual Capacity Development Program Implementation Report (due by 11/30<sup>th</sup> each year)]

The CDP Annual Report was completed and submitted to EPA Region 3 by 11/30/07. Seven CDP water system assessments/reports were completed or underway 7/1/07 through 12/31/07. This is less than was projected due to expanding the CAPDEV activities and shortage of staff. Recently lost a CDA staff member due to a transfer and have posted the open position for a replacement.

##### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

Data shows our existing system's assessment activities are having a positive impact on water systems. Most water systems are addressing some portion of the recommendations OEHS provides. Generally, these tended to be the easier recommendations.

### **Future Plans**

OEHS will continue expanding our more pro-active assistance efforts.

### 3.1.3 Other Annual Reviews and On-going Reporting Requirements:

#### **Task 3.1.3.1**

**Submit, and periodically update,** a list of CWSs and NTNCWSs that have a history of significant noncompliance (SNC) and, to the extent practicable, the reasons for their noncompliance. (This activity repeats every three years – **Next List Due August 6, 2009**) SDWA 1420(b)

#### **Outputs/Progress To Date**

The Safe Drinking Water Act (SDWA) ' 1420(b)(1) requires periodic update and evaluation of Community and Non-transient Non-community Systems on the Historic Significant Non-compliance (SNC) List. The periodic update is due every three years. The most recent Historic SNC List evaluation was submitted to EPA July 12, 2006, as required by the SDWA. No action or outputs due this fiscal year.

#### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

A number of systems, including some very well run systems, appeared on this list due to unexpected violation of new monitoring requirements, primarily initial Stage 1 Disinfection Byproducts Rule (DBPR) sampling results. With advice and help from our field staff, most systems are addressing this problem through minor treatment application modifications. However, some systems require capital investment in new or modified treatment equipment and will take longer to return to compliance.

#### **Future Plans**

The next report will be prepared and submitted by August 6, 2009.

### **Task 3.1.3.2**

The State must **submit a report to the Governor** on the efficacy of the strategy and progress made toward improving the technical, managerial, and financial capacity of PWSs in the State. The report shall also be made available to the public. (This activity repeats every three years – **Next Report Due September 30, 2008**)

### **Outputs/Progress To Date**

Most recent Report to the Governor was completed September 2005.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

None this period.

### **Future Plans**

Next report will be prepared and submitted by September 30, 2008.

## **3.2 Operator Certification Programs**

**Task 3.2.1** [Relationship to On-going Program: Improve understanding of the contribution of operator certification program activities in supporting other aspects of the State drinking water and ground water programs]

To avoid a 20% SRF withhold, States must continue to implement Programs that meet the baseline requirements of the Guidelines and provide Annual Program Reports as per EPA Guidance memo dated 10/15/2001. **Reports due June 30<sup>th</sup> each year.**

### **Outputs/Progress To Date**

- Annual operator and training program report, as per EPA Guidance, was submitted to EPA by the June 30, 2007 deadline and approved Sept 28, 2007.
- Implementing new Water Operator Regulation (64CSR4).
- Continued participation with the Drinking Water Exam Review Committee (DWERC), comprised of state regulators, educators (WVETC and WVRWA) and higher classification water operators to review and revise operator certification exams to increase training and testing relevance and comply with US EPA requirements. This committee meets monthly and has validated the Class I-IV exams, assembled reference lists for Class III and IV operators, and most recently completed two versions of the new Water Distribution certification exam with a reference list and content areas outlined. The committee is currently working on revising both versions of the Class II exam. The DWERC will continue to work towards 2 complete versions of each classification exam with references, organized by content areas based on Need-to-Know criteria. All exam questions are based on what operators “Need to know” for the job. All information developed by the committee to aid operator training will be posted to the website upon completion.
- Other highlights during this period:
  - The Operator Certification Expense Reimbursement Grant is ongoing and progressing. (See section 7. for more detail).
  - The Certification and Training (C&T) Section website is regularly reviewed and updated, which provides operators additional access to forms, certification requirements, training schedules, study materials, testing dates, regulations, the Drips and Drops newsletters and continuing education information including an approved CEH course list. A counter was added on 6/21/07 to provide more quantitative information on its use and as of 1/15/08 it had been accessed 2,520 times.
  - OEHS continues biannually publishing and distributing the *Drips and Drops* newsletter to all water and wastewater operators. This newsletter keeps operators informed of new regulations and events that might impact them. July 2007 a special edition of the newsletter on the new operator regulations went out. November 2007 another issue was completed. Spring 2008 will be the next issue release date.
  - OEHS continues to send out notification letters concerning upcoming operator renewals quarterly and expiration information every month to individual operators.
- A total of 522 water operators were certified or recertified and certificates were issued.
- A total of 201 students attended PWS operator certification training.
- A total number of 47 CEH courses (435.25 hours) were approved. Specifics noted below:
  - CEH courses applications reviewed – 36 classes (206.75 hours).
  - CEH course applications approved – All 36 classes (206.75 hours) were approved (100%).
  - No CEH courses declined or withdrawn.
  - "900" courses, which are nationally recognized courses or college courses, accepted, without review, and added - 1 CEH courses (228.5 total hours)
  - Since 2001, a total of 1,066 CEH courses (6,066.54 hours) have been approved.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes] Evaluate success of work.

- Need to continue to review and revise all operator training resources available as new technology and requirements are continually added.

### **Future Plans**

- Continue to develop and complete Operator Certification Expense Reimbursement Grant projects.
- Continue to improve operator training resources.
- Establish an Operator Awareness Committee to proactively address the operator shortage issue by identifying and directing effective efforts to promote the water operator profession.
- Continue exploring alternative means of training water operators, e.g. online training, vo-tech schools, and community colleges to support certification renewal and training.
- Continue to participate with and chair the Drinking Water Exam Review Committee (DWERC).
- Continuing to develop Operator Certification databases. Phase Three has not yet been developed. This phase is intended to allow for limited, “Read Only” access via the internet to review current status of water operators by our district staff.

### **3.3 Source Water Assessment and Protection Activities**

**Background Notes:** Source water assessments are required of primacy States, if the State chooses to adopt alternative monitoring requirements under 1428(b). DWSRF funds can be set aside to administer or provide technical assistance through source water protection programs.

### **Task 3.3.0**

Implement State Source Water Assessment Program (SWAP) Plan, and **report progress and relevant activities underway**. Include copies of contract agreements, MOUs, etc. with other agencies and contractors as per DWSRF Grant Condition. Discuss any significant barriers to implementation with EPA as soon as possible.

#### **The Strategic Measures are:**

- a)** # and % of population and community water systems (or source water areas) that will achieve minimized risk to public health by substantial implementation, as determined by the state, of source water protection actions in a source water strategy.
- b)** # and % of community water systems (or source water areas) that have a protection strategy in place.
- c)** # and % of community water systems (or source water areas) that have implemented some aspect of a protection strategy.

Report this information using the Source Water Assessment and Protection Reporting matrix (Attachment E).

SDWA 1453(a)(3) & GPRA

### **Outputs/Progress To Date**

# of assessments conducted as of 12/31/07:

at CWS = 302

at NTNCWS = 109

at TNCWS = 429

Note: As of June 30, 2005, the Source Water Assessment and Protection (SWAP) program has completed assessments for 100% (delineation through public availability) of the community and non-community public water supply systems that were in existence at the time the program was approved in November 1999. Systems active after November 1999 are currently being assessed.

Highlights during this reporting period:

- The Wellhead Protection/ Source Water Protection Program Annual Report was completed and submitted as required in September 2007. See Appendix E.



- Public Outreach/Educational Activities continues:
  1. Continued participation with the WV DEP Project WET (Water Education for Teachers), a nonprofit water education program for educators and young people ages 5-18.
  2. September 21, 2007 Participated in the annual Water Festival, which consists of hands-on water-related activities with approximately 200 local 4<sup>th</sup> and 5<sup>th</sup> grade students.
  3. The SWAP program has developed a program to loan groundwater models to schools that complete the Project Wet training. Three (3) groundwater flow models have been loaned out to date, two (2) to Kanawha County teachers and one (1) to a watershed association from Monroe County active in public education including a summer water workshop for school aged children. Recipients agreed to report their use of the groundwater flow model in the first semester. These reports are due in January 2008. The Ground Water Model Loan Program will be evaluated after review of the January 2008 reports.
  4. The West Virginia Bureau for Public Health (WVBPH) website continues to provide information on the SWAP/WHP programs and guide municipalities, water suppliers, or other groups through developing a local SWAP program. Website contains fact sheets, new SWAP posters, general information and an updated online SWAP educational course, "A Guide to Developing a Source Water Protection Plan".
  5. Provide educational materials, posters and brochures concerning the SWAP/WHPP program.
  6. Staff attended and presented at a master well owner conference held at Jackson's Mill State Park on November 10, 2007. In addition several WV certified drillers attended and participated in discussions. Approximately 50 people from across West Virginia attended this one-day conference.
- Continue to participate in the Alternative Monitoring Strategy Program (AMSP), which determines future monitoring frequency reductions, is dependent on having a SWAP/WHP program in place.
- Revised regulations and design standards for private water wells have been submitted to the WV Legislature for review and possible approval during the 2008 session for protection of groundwater.
- Evaluation of new public water supply water wells or intakes to assure they are located in areas where contamination threats are minimal. Permits for new public water wells now require an initial survey for potential sources of contamination within 2000 feet of proposed well location with site-specific information used when available.

- Provide grants through the Source Water Protection Grants Program, to surface water and ground water community PWSs to establish and implement water protection programs. Please review the supplemental grants funds progress activity report for additional details on status.
- An expression of interest contract for implementing wellhead and source water protection activities has been developed. Please review the supplemental grants funds progress activity report for additional details on status. Coordination of SWAP activities with the WV Rural Water Association (RWA). During this report period, RWA lost federal funding for both the SWAP and WHP circuit riders positions.
- Coordination of SWAP activities with the WV Rural Water Association (RWA). During this report period, RWA lost federal funding for both the SWAP and WHP circuit riders positions.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

- DEP UIC Class V program inspected 111 sites with 53 sites requiring corrective actions, such as plugging floor drains.
- Quarterly reports are received from DEP.
- A total of \$314,838 has been awarded for the Source Water Protection and Wellhead grant projects during the 2007 and 2008 grant years.

**Future Plans**

- Development of the Yield and Drawdown Guidance manual has been slowed due to revisions to the WV current water well design standards and regulations rules. Both rules have been submitted to the WV state legislature for the 2008 period for revision and approval. Status of the guidance manual will be reviewed after passage of rules.
- Updating the Zone Critical Concern (ZCC) and watershed delineation software program used in the Source Water Protection program. Currently reviewing the potential updates with the West Virginia University.
- Continue participation and provide funding for the Potomac Drinking Water Source Protection Partnership. This partnership is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Potomac River basin.

- Continue to participate in the Alternative Monitoring Strategy Program (AMSP), which determines future monitoring frequency reductions, is dependent on having a SWAP/WHP program in place.
- Development of a contract proposal with the USGS and West Virginia Geologic Survey to study the hydrologic flow in abandoned coalmines in McDowell County. Please review the supplemental grants funds progress activity report for additional details on status.
- WVDHHR will continue to fund the DEP class V UIC program.

### **Task 3.3.1**

Coordinate with Clean Water Act programs to promote development of TMDLs or WQS that protect drinking water sources.

#### **Outputs/Progress To Date**

Staff of the OEHS continues to have a working relationship between the State's SDWA program and the Clean Water Act programs (TMDL and the WQS programs) at the WVDEP to help provide the most accurate and representative assessment of the states source waters.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

#### **Future Plans**

Continue to attend Clean Water Act program (TMDL and the WQS) meetings.

**4. Recommended Activities** (These are activities that do not affect PWSS Primacy or the receipt of Drinking Water State Revolving Funds Set-aside funds. However many of these activities could be funded under either program.

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.

**Subobjective 1:** Water safe to drink

#### **Task 4.1**

Enter informal enforcement actions (e.g. NOVs or any other action with a data field in SDWIS that is not considered formal like an Admin. Order) to SDWIS to present more complete picture of violation follow-up.

**Outputs/Progress To Date** [Discuss informal actions taken that have been entered into SDWIS]

Notice of Violation, Public Notice Requested and Public Notice Received are routinely entered into SDWIS/State Web Version 1. The The NOV's are discussed in section 2.2.2.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

#### **Future Plans**

The NOVs PN Requested and PN Received will continue to be entered into SDWIS/State Web Version 1.

#### **Task 4.2**

Enter or correct latitude/longitude information to SDWIS for any remaining systems. Enter or correct the information on surface water systems first. Priorities for entering data for the remaining systems are groundwater CWSs next, then groundwater NTNCWSs, followed by TNCWSs. Coordinate, as appropriate, with the EPA data management staff to ensure that all needed data storage capabilities for source water protection efforts are accounted for in the modernized EPA STOrage and RETrieval system (STORET), EPA's data management program for ambient water quality. Also coordinate with State Clean Water Act and EPA staff to strengthen State georeferencing capabilities to better track monitoring information for mapping and GIS applications. GIS tools, including the Reach File 3 system that assigns unique location identifiers to the waters of the U.S., will be valuable in source water assessments.

#### **Outputs/Progress To Date**

Latitude and Longitude Data in SDWIS is 99% complete. Continue to add new water well sources to SDWIS as they become active. West Virginia DHHR continues to share source water polygon data with the EPA for use by all federal agencies as the single source of data.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

#### **Future Plans**

Continuation of entering Latitude and Longitude data for new sources as necessary.

### **Task 4.3**

#### **Develop and maintain a Cross Connection Control Program. §142**

### **Outputs/Progress To Date**

WV is maintaining a database of certified Backflow Prevention & Assembly Inspector Testers (BPAIT) in West Virginia. WV provides information on certified BPAITs through a website searchable by county and the individual's last name alphabetically. Website also includes a Cross-Connection Fact Sheet, Cross-Connection and Backflow Prevention manuals by OEHS and EPA.

WVDHHR continues to be the primary agency for implementing and maintaining cross-connection and backflow prevention programs for water systems as defined by WV Legislative Rule 64CSR15 and 64CSR25. WVDHHR acts as an information resource by providing a generic information booklet containing all the necessary information required for a water system to establish and to maintain a cross-connection and backflow prevention program. This information is supplemented by the WV EW-114 "Cross-Connection and Backflow Prevention Manual" and EPA 816-R-03-002 "Cross-Connection Control Manual". This information has been sent to eleven water systems during this year. OEHS also responds to written and phone inquiries.

The OEHS' five (5) OEHS District Offices continue to monitor water systems for their "Cross-Connection and Backflow Prevention Programs/Plans" and report their findings in a Sanitary Survey. The Sanitary Survey provides information for correcting deficiencies and non-compliance.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

Our generic "Cross-Connection and Backflow Prevention Program/Plan" has proven to be a valuable tool to a great number of water systems in the state. Also, our participation in classroom settings, on-site visits, sanitary surveys, and capacity development assessments, which are outreach programs, have increased the awareness of community water systems as to their legal responsibilities and for the necessity to implement and to maintain a cross-connection and backflow prevention program.

Face-to-face contact with water operators and backflow prevention tester/inspectors result in greater cooperation and accomplishes the desired outcome. Also, closer cooperation between OEHS and WVPSC has been recognized as a need because of fundamental

differences in interpretation of each others' rules and regulations and both agencies' overall philosophical approach to cross-connection and backflow prevention concerns. We also work closely with WV Rural Water Association to enhance their outreach and training programs.

### **Future Plans**

OEHS plans to maintain our status as an information resource and to continue to monitor water systems by Sanitary Surveys and capacity development assessments. Also, OEHS will continue to participate in the class room training for water operators, backflow preventer tester/inspectors, and sanitarians. On-site assistance will be provided as per request by water systems.

The WV Public Service Commission (WVPSC) mediates complaints between water systems and their customers. OEHS will continue to work closely with WVPSC concerning cross-connection and backflow complaints.

#### **Task 4.4**

**Interact with other State programs, local governments, and other stakeholder groups** that affect or are affected by the drinking water program (e.g., wellhead protection programs, watershed protection programs and the Potomac River Basin Drinking Water Source Protection Partnership).

### **Outputs/Progress To Date**

Building Partnerships-Inter-agency cooperation and other alliances:

- Continuation of the SWAP/WHP Memorandum of Understanding (MOU) that has been signed by a number of state ground water regulatory agencies, establishes a coordinated effort by all agencies to protect ground water in delineated SWAP/WHP areas. The MOU enhances the SWAP/WHP program's ability to protect ground water utilized by public water systems.

- Provide funding for the WV DEP Underground Injection Control (UIC) Class V program to locate UIC Class V wells in source water protection and sensitive hydrological areas within West Virginia. This work also includes an inventory of underground and above ground storage tanks in the SWAP/WHP area.
- Provide funding and participation with the Potomac Drinking Water Source Protection Partnership. This partnership is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Potomac River basin.
- Continuing a working relationship between the federal *Safe Drinking Water Act* and the *Clean Water Act* programs within the state to provide the most accurate and representative assessment of source waters, based on available data which the state believes best reflects the quality of the resources.
- Continue participation in a SWAP/WHP joint-effort with WVRWA under an EPA grant through the National Rural Water Association. Through this cooperative effort, WVRWA water technicians are working with the local SWAP and WHP's areas within the state. During this reporting period, Rural Water lost EPA funding for the SWAP Wellhead effort.
- Use hydrogeologic information from the US Geological Survey to help define SWAP/WHP areas. Working with the USGS, using existing and new information to help characterize the hydrogeologic setting and develop mathematical simulation of ground-water flow models of different regions of the State to determine the degree of detail appropriate for the source water assessments.
- Assist in educational and outreach efforts in developing and prioritizing protection measures in conjunction with local drinking water protection efforts.
- Improve cooperation and coordination between state agencies and federal programs with localized and statewide conferences and meetings.
- Evaluate Federal EPA's "New SNC Approach" proposal as part of the State Drinking Water Program Administrator Group to input recommendations to EPA.

#### **Outcomes/Benefits (Lessons learned, if any)**

Development of a local protection program is an important part in order to provide monitoring relief to a water system.



## **Future Plans**

OEHS will continue to build inter-agency cooperation per current progress to date.

Continue to interact with other State programs, local governments, and other stakeholder groups that affect or are affected by the drinking water program (e.g., wellhead protection programs, watershed protection programs and the Potomac River Basin Drinking Water Source Protection Partnership) by continuing to develop partnerships and alliances.

OEHS plans to continue the efforts to coordinate source water and source water assessments.

Continue to use current information on the hydrology and hydrogeology within West Virginia to determine the degree of detail appropriate for the source water assessments.

### **Task 4.4.0**

**Plan for source water protection and source water assessment programs simultaneously.** For example, use current information on the hydrology and hydrogeology of different regions of the State to determine the degree of detail appropriate for the source water assessments. These assessments are necessary to support the source water protection programs being considered. Protection programs will likely be necessary in order to provide local flexibility on monitoring relief, ground water disinfection, regulation of Class V underground injection control wells, and filtration.

## **Outputs/Progress To Date**

- Working with the USGS, using existing and new information to help characterize the hydrogeologic setting and develop mathematical simulation of ground-water flow models of different regions of the State to determine the degree of detail appropriate for the source water assessments.
- WHPP and SWAP helps guide local drinking water protection efforts and awareness by helping to prioritize protection efforts and program resources.
- Assist in educational and outreach efforts in developing and implementing protection measures. Improve cooperation and coordination between state agencies and federal programs with localized and state wide conference and meetings.

- OEHS continues to help fund the DEP UIC Class V program.

### **Outcomes/Benefits (Lessons learned, if any)**

Development of a local protection program is an important part in order to provide monitoring relief to a water system.

### **Future Plans**

OEHS plans to continue the efforts to coordinate source water and source water assessments.

Continue to use current information on the hydrology and hydrogeology within West Virginia to determine the degree of detail appropriate for the source water assessments.

#### **Task 4.4.1**

**Participate in State implementation** of the 305(b) guidelines for drinking water to elevate awareness of drinking water as a designated use within the 305(b) program, increase the percentage of waters assessed for drinking water use support, and enhance the accuracy and value of the assessments. Facilitate a working relationship between the State drinking water and clean water staff to provide the most accurate and representative assessment of source waters, based on available data which the State believes best reflects the quality of the resource. Adopt the Watershed approach. Work with State water quality standard staff to ensure that use designations under the Clean Water Act reflect the location of surface source water areas for drinking water intakes, and wellhead protection areas which may be influenced by surface water (i.e., induced infiltration of surface water into drinking water wells). Be sure upstream dischargers are aware of downstream drinking water intakes. Also, work cooperatively with State ambient monitoring staff, including the 305(b) staff, to ensure that duplication of monitoring efforts in source water assessment projects are not occurring, that existing data are recognized and used, and that any new data that are collected are appropriate. EPA Region III will assist in the use of STORET data as needed.

### **Outputs/Progress To-Date**

- OEHS staff continues to build a working relationship between the State's SDWA program and the water quality standards program at the WVDEP and the Clean Water Act program to provide the most accurate and representative assessment of source waters, based on available data which the State believes reflects the quality of the resource.
- The WVBPH website continues to provide information on the SWAP/WHP programs and guide municipalities, water suppliers, and other groups through developing a local SWAP program.
- OEHS participates with the USGS and WVDEP on the ambient groundwater monitoring program.

#### **Outcomes/Benefits (Lessons learned, if any)**

#### **Future Plans**

Development of a secure website that will provide the wellhead and source water protection areas, locations of public supply wells, and potential contaminant sources for use by state and emergency management, federal agencies and utilities.

#### **Task 4.5**

**Coordinate with national, State, and local agencies** to encourage identification and reporting of waterborne disease outbreaks associated with drinking water.

#### **Outputs/Progress To Date**

Continual communication with the Public Health Sanitation Division, Office of Epidemiology and Health Promotion, Centers for Disease Control and Prevention and Local Health Departments concerning common areas of work, including potential waterborne disease outbreaks. No known waterborne disease outbreaks were reported during this reporting period.

#### **Outcomes/Benefits (Lessons learned, if any)**

## **Future Plans**

Continue communication and process of working with these agencies to encourage identification and reporting of waterborne disease outbreaks associated with drinking water.

### **Task 4.6**

**Encourage systems to optimize their treatment plant performance beyond current requirements.** (Participation in Partnership for Safe Water and/or Area Wide Optimization Program)

## **Outputs/Progress To Date**

OEHS actively participates in the US EPA Region III's Area Wide Optimization Program (AWOP).

All surface water systems' (conventional filtration) statewide rankings were updated (status component) based on turbidity goals (0.1ntu 95% of time – finished water), significant deficiencies, and various measures of compliance.

Lower ranking systems were advised of their need to implement improvements.

OEHS participated in all quarterly EPA sponsored multi-state AWOP meetings.

OEHS participated in all AWOP Performance Based Training multi-state workshops.

OEHS commenced involving additional representatives (engineers) in the multi-state AWOP functions and meetings.

## **Outcomes/Benefits (Lessons learned, if any)**

Lower ranking systems implemented improvements to improve their statewide ranking.

Water system operators became more knowledgeable of their system's statewide ranking and became more proficient in analyzing historical turbidity and disinfection byproducts data.

Consumers of improved water systems were provided quality drinking water with less risk of waterborne illnesses.

Water system operators commenced focused training relative to recognizing barriers to lower finished water turbidity and learned techniques to implementing WTP (Water Treatment Plant) operational changes to obtain consistently lower turbidity.

OEHS representatives obtained training in starting in-state PBT (Performance Based Training) programs and techniques to train operators.

### **Future Plans**

OEHS will continue to participate in the AWOP and PBT (Performance Based Training) programs.

OEHS will continue to advise systems of their need to recognize and implement operational changes to lower finished water turbidity.

OEHS will continue to train additional OEHS representatives in the principles of AWOP and PBT (Performance Based Training).

### **Task 4.7**

**Perform public education responsibilities**, such as responding to press inquiries, educating the general public, and conducting outreach.

### **Outputs/Progress To Date**

- OEHS partners with the WVDEP Water Training Program to train public school teachers and students about drinking water issues.
- Participate at various meetings and conferences across the state to present information on the Source Water Protection Program.
- Exhibit at various conferences to provide information to the general public.
- Maintained the OEHS internet website with current information.
- Responded to press inquiries concerning public water systems.
- Presented an overview of Wellhead Protection and water well protection at the Master Well Owner Network Workshop on November 10, 2007.

### **Outcomes/Benefits (Lessons learned, if any)**

### **Future Plans**

Continue to partner with the WVDEP Water Training Program to train public school teachers and students about drinking water issues.

Sponsor or co-sponsor a Water Protection conference in 2008.

Continue to exhibit at various conferences to provide information to the general public and water operators.

Continue to update the internet website.

Continue to respond to press inquiries concerning public water systems.

### **Task 4.8**

**Improve communications with other agencies, and outreach to the public.** Maintain computer communications with field offices.

**Outputs/Progress To Date** [Discuss any changes/improvements made or being done to enhance communications]

Please refer to sections 3.2.1, 3.3.0, 4.4.1 and 4.9 concerning internet access with other agencies and to the public.

September 21, 2007 Participated in the annual Water Festival, which consists of hands-on water-related activities with approximately 200 local 4<sup>th</sup> and 5<sup>th</sup> grade students.

Several OEHS staff presented part or all of the following CEH courses on drinking water program topics at the WV RWA annual conference this September 2007:

- CAPDEV Water Class
- Water Regulations & Water Plant Operator Open Forum
- Update of the S2DBPR and the LT2ESWTR Rule
- Funding Agencies Round Table Discussions - WDA, IJDC, WVBPH, DEP & AML

Staff attended and presented at a master well owner conference held at Jackson's Mill State Park on November 10, 2007. In addition, several WV certified drillers attended and participated in discussions. Approximately 50 people from across West Virginia attended this one-day conference.

#### **Outcomes/Benefits (Lessons learned, if any)**

#### **Future Plans**

Please refer to sections 3.3.0 and 4.4.1.

#### **Task 4.9**

**Track the following compliance assistance activities:** small system assistance programs, workshops, onsite assistance, guidance on State regulations and other outreach materials, hot lines or other responses to inquiries from individuals, trade shows, and conferences.

**Note:** The Office of Enforcement and Compliance Assistance at Headquarters is interested in State compliance assistance efforts. Please provide whatever information is easily available, or that does not require extensive time and resources to collect. (This type of information should also be included in the State's Annual Compliance Report, due each July 1 for the previous calendar year.)

#### **Outputs/Progress To Date**

Presented an overview of the proposed PWS Operator Regulation (64CSR4) at the WV RWA Annual Conference September 10, 2007. Sent out informational packets to Schedule 3 and 4 S2DBPR and Schedule 3 LT2ESWTR affected systems. Answered telephone and email inquiries concerning the drinking water program. OEHS conducted one CAPDEV meeting and maintained an information booth at WVRWA annual conference.

Presented an overview of Wellhead Protection and water well protection at the Master Well Owner Network Workshop on November 10, 2007.

#### **Outcomes/Benefits (Lessons learned, if any)**

The participating water system representatives have found the CAPDEV meetings to be useful to build networking relationships with other system's personnel. This networking has enabled water system personnel with common goals to share experiences and offer assistance to those in need. The ultimate goal would be to have water systems approve mutual aid agreements in the event of an emergency.

#### **Future Plans**

CAPDEV plans to sponsor two meetings per year for water systems to discuss issues and provide networking contacts. Continue to track compliance assistance activities by reviewing and tracking workshops, compliance assistance tools, telephone assistance, onsite visits and small system assistance programs.

OEHS staff plans to present an overview of the new PWS Operator Regulation (64CSR4).



**Task 4.10**

**Water Conservation Guidelines:** On August 6, 1998, EPA published a document entitled "*Water Conservation Plan Guidelines*." These voluntary guidelines will encourage conservation by water systems, particularly small systems, thereby extending the life of water treatment infrastructure and reducing costs.

The guidelines do not contain any federal requirements; however, after August 6, 1999 states and Indian Tribes may require water systems to submit a water conservation plan consistent with EPA's guidelines as a condition of receiving a loan from a State Drinking Water Loan Fund.

**Outputs/Progress To Date**

West Virginia does not require "Water Conservation Plan Guidelines" from DWTRF Loan applicants.

**Outcomes/Benefits (Lessons learned, if any)** [Provide numerical results, i.e., as result of "Progress" . . . ]

**Future Plans**

OEHS will initiate this requirement when water conservation is required by the state.

#### **Task 4.11**

**Drought Contingency and Water Supply Assistance:** Continue to monitor water systems affected by drought conditions to ensure an adequate supply of water. Assist water suppliers with obtaining alternate sources, handling any contamination associated with the drought, development of contingency plans and assisting with outreach efforts on water conservation.

#### **Outputs/Progress To Date**

Systems were surveyed for potential and existing drought conditions during low rainfall periods and offered assistance in obtaining emergency water tankers and other supplemental supplies.

Three systems reported drought conditions in reporting period (Whitmer Water Association, Oceana, and Hurricane Water Department). Several others reported potential drought conditions. Technical assistance was provided.

Emergency response plans of drought vulnerable water systems were reviewed for drought planning during sanitary survey inspections. Recommendations were suggested where needed.

#### **Outcomes/Benefits (Lessons learned, if any)** [Provide numerical results, i.e., as result of “Progress” . . . ]

Vulnerable systems were advised to reduce water losses by locating and repairing pipeline leaks and/or arranging for operable interconnections with adjacent systems where applicable.

Systems were advised of the need to update or revise their water supply contingency planning.

Procedures to access inadequate emergency water supplies were addressed.

Potential for inadequate water supplies were reduced.

## **Future Plans**

OEHS will assist systems likely to be impacted by drought conditions as they occur and provide assistance to emergency services offices, as needed.

OEHS will continue to advise systems of their need for appropriate backup water supply planning and recommend pipeline repairs to reduce water losses.

OEHS will continue to offer assistance to systems which are vulnerable to inadequate water supplies.

### **5. Additional State Activities which are funded with PWSS Grant or DWSRF Set-aside fund monies:**

Include here narrative on any additional projects funded under the PWSS Grant or with DWSRF Set-aside funds (e.g., lab certification issues and violations reported in annual compliance report). You may also use this area to give narrative on staffing and GUDI, track equipment purchases, etc. or do so on a separate page as in previous reporting periods.

#### **Task 5.1 (Narrative on Staffing Vacancies)**

**Report** on status of staff level and document source of funding for each FTE (e.g., PWSS, SRF, etc.)

## **Outputs/Progress To Date**

Please see attached Staffing Letter dated 02/15/08. OEHS has started hiring temporary staff when there is difficulty in filling permanent positions. It will be our intention to fill positions with permanent staff, but we will continue to utilize temporary staff as necessary.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

## **Future Plans**

OEHS will continue to maintain and attempt to enhance staffing levels. OEHS will also review options for various classifications and utilize another classification if necessary (i.e. Geologist and Engineering Technician classifications have started using Environmental Resource Specialist classifications and Engineers have started using Technical Analysis classifications). OEHS is looking at the option of hiring temporary employees as needed.

### **Task 5.2 (Narrative on activities to complete GUDI determinations)**

**Report** on issues/concerns, challenges to completing GUDI determinations

## **Outputs/Progress To Date**

See Task 2.2.6 for current status.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

## **Future Plans**

See Task 2.2.6 for future plans.

**6. Water Protection (Security) Coordination Grants Separate Guidance is issued regarding these grants. This section of the checklist can be used to list the activities funded so that the Checklist can be used for reporting purposes.**

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish

and shellfish, and in recreational waters.

**Subobjective 1: Water safe to drink**

**Outcomes:** Improved protection of critical infrastructure; increase state preparedness, response, and recovery capabilities; increased state coordination, communication and information sharing capabilities; changes in management and operation of water systems based on training; increased awareness of water utilities, general public, local police and emergency responders, and others of the areas of concern from public water system perspective. **NOTE:** State is required to give “detailed” narrative of work being performed and on the “progress” being made under each funded set-aside. Listing activities in one or two sentences does not give a complete picture. State’s narrative should tell a story, connecting the information from previous reports to current. EPA also suggests including numbers where ever it is feasible ( e.g. # of courses held) and discuss results or effectiveness of activities being performed.

**Task 6.1**

**S&T Emergency Preparedness**

**Outputs/Progress To Date**

OEHS hosted a drinking water security exhibit at the WV Rural Water Association’s (WVRWA) annual conference in September 2007 and provided security and emergency preparedness information in a variety of formats.

OEHS sponsored a second series of five threat preparedness workshops, four of which were conducted between July 1, 2007 and December 31, 2007.

“DO NOT TAMPER” warning signs were purchased and distributed to public water systems for posting at their facilities.

OEHS assessed backup power generation capabilities for additional community public water systems.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

Public water system personnel threat preparedness awareness is increased through workshops. (The second series of threat preparedness workshops concluded January 24, 2008.)

Public water systems are better prepared and protected against unauthorized intrusions and/or efforts to damage or contaminate their

water supply.

Consumers' drinking water is better protected.

Water service can be restored more quickly in the event of an interruption, either by intentional acts of terrorism and/or vandalism or by natural unintentional emergencies.

### **Future Plans**

Continue distributing and/or developing security and threat preparedness outreach materials, utilizing various formats.

Continue hosting security exhibit at future WVRWA annual conferences and other appropriate professional events.

Consider additional workshops/drills to prepare water systems for threats to their infrastructure and drinking water.

### **Task 6.2**

#### **STAG Emergency Communication**

### **Outputs/Progress To Date**

OEHS' emergency response employees were provided cell phones and pagers.

Summer intern updated emergency public water system contact information database.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

Rapid response abilities during threat and/or emergency situations are improved through cell phones and pagers.

Accurate emergency contact information increases the ability to rapidly dispense critical homeland security messages or alerts to key water system personnel.

### **Future Plans**

Continue providing cell phones and pagers to appropriate OEHS emergency response personnel.

Continue providing tablet PC's to the emergency response employees to allow quicker access to information.

Perform annual update of emergency public water system contact information database and Water/Wastewater Agency Response Network (WARN) system by hiring summer intern.

Purchase emergency radios for each district office which can communicate with state central emergency operations centers during adverse conditions when cell and landline phones and pagers are inoperative.

### **Task 6.3**

**Status of Grant Expenditures** [Breakout dollar amounts per activity or budget categories, e.g. DWSRF]

**Former Expense:** [Explain reason(s) for slow drawdown of funding]

There have been numerous reasons for slow drawdown of funds, including:

- Staffing vacancies – This not only impacts the salary of vacant positions, but also the fringes
- Travel Expenses
- Supplies
- Administration of contracts

Some items were proposed and the cost was less than expected.

Workplan conceptional ideas and the actual implementation costs did not always match.

**Current Year Expense:**

This will be reported in the DWSRF annual report, scheduled to be submitted September 2007.

**Future/Projected Expense:**

Please refer to “WV DWSRF Set-Aside Progress Activity Report for Time Period July 1, 2007 – December 31, 2007”, submitted under separate cover, for future/projected expense.

**7. Operator Certification Expense Reimbursement Grants (ERG)**

**Separate Guidance has been issued for these grants. Use this space on the Checklist to capture the funded activities and use this tool for reporting purposes. NOTE:** Environmental Results provisions do not apply to these grants. These grants were awarded prior to EPA Order.

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.

**Subobjective 1:** Water safe to drink

**NOTE:** State is required to give “detailed” narrative of work being performed and on the “progress” being made under each funded set-aside. Listing activities in one or two sentences does not give a complete picture. State’s narrative should tell a story, connecting the information from previous reports to current. EPA also suggests including numbers where ever it is feasible ( e.g. # of courses held) and discuss results or effectiveness of activities being performed.



### **Task 7.1 e-Training**

#### **Progress To-Date**

Online Training – OEHS continues to contract with 360 Water, Inc. to provide continued free, online training for small system water operators to receive approved CEHs. During this reporting period, 11 operators from 11 small PWSs received free CEH training online to use towards renewal. A total of 69 classes were taken.

A Request for Quotation is currently being developed to provide additional, free, technology-based, interactive, distance educational training courses for small system operators in West Virginia from multiple vendors. It is anticipated this contract will be awarded in early 2008.

#### **Benefits (Lessons learned, if any)**

#### **Future Plans** [Discuss plans to revise workshop to include other activities]

Select a vendor to develop electronic learning activities and resources for web-based and CD-ROM delivery. Advertise any new electronic training developed through contract. Additional contracts seeking additional vendors might be developed based on the success of this training.

### **Task 7.2 In-house Internet Training**

#### **Progress To-Date**

A Request for Quotation went out July 19, 2007 to identify an outside vendor to develop and provide technology-based, interactive distance educational training courses for small system operators in West Virginia. A contract (EHS80365) was awarded on

September 1, 2007 to develop and provide the above mentioned on-line and electronic operator training. The contract is with E-train Online, Inc. and will provide a Basics and Help System available online and via CDROM upon its completion. A kick-off meeting was held with E-train Online, Inc. at our office on November 1-2, 2007. The contract is in progress and the project will be completed by September 1, 2008.

Developing a Request for Quotation to provide additional technology-based, interactive, distance educational training courses for small system operators in West Virginia. This will provide advanced learning on topics such as source water protection, capacity development, emergency awareness and compliance sampling. It is anticipated this contract will be awarded in early 2008.

Developing a 1D certification course in WebCT platform by in-house staff to improve availability to operators. Met with DHHR Distance Learning Managers for additional information on WebCT platform. Future progress based on when personnel can support this effort in addition to current job duties.

Purchase workstations with computers for each of the 5 district offices to facilitate future operator use of electronic training courses. Met with information technology group to discuss network security issues involved with providing non-state employee operators computer access. Met with administration to determine modular furniture needs for each location. It is anticipated this equipment be ordered in early 2008.

#### **Benefits (Lessons learned, if any)**

#### **Future Plans**

Considering purchasing video conferencing equipment for Charleston central office, west-wing training room. Need to determine current access to existing video conferencing equipment nearby.

### **Task 7.3 Backflow Prevention Assembly Test(s)**

#### **Progress To-Date**

OEHS continues to contract with WV ETC to provide the required Backflow Prevention Assembly Inspector/Tester (BPAIT) certification course across the state.

- Two (2) 8-Hour BPAIT Recertification Classes (July 24, 2007 and October 29, 2007) with 11 students total (2 from small PWSs less than 3,300).
- One (1) 40-Hour BPAIT Certification Class on November 5 - 9, 2007 with 13 students total (2 from small PWSs less than 3,300).

Received informal notice from WV ETC to renew current contract for one year with the same terms. EHS continues to contract with WV ETC to provide the required Backflow Prevention Assembly Inspector/Tester (BPAIT) certification course across the state.

#### **Benefits (Lessons learned, if any)**

#### **Future Plans**

Continuation of contract with WVETC to continue the training.

**Task 7.4**

**Status of grant expenditures** [Breakout dollar amounts per activity or budget categories, e.g., DWSRF]

**Former Expense:** [Explain reason(s) for slow drawdown of funding]

Workplan conceptional ideas and the actual implementation of the project did not always match.

Workplan conceptional cost and the actual implementation cost of the project did not always match.

The development of purchasing requests, bidding procedures, administration of contracts and various staffing vacancies have created delays in completing projects and drawing down of funds.

**Current Year Expense:**

**Future/Projected Expense:**

Continue to implement the approved workplan, which identified remaining funds and how they will be expended. The following projects are planned and approved under current, amended ERG workplan:

1. Training Trailer to allow small system operators across WV to receive on-site training by utilizing a system of mobile resources and a water operator training specialist to provide technical assistance, training, and distribution of drinking water industry resources. This project will be divided into 2 parts. Part I will design and purchase the training trailer equipped with water treatment equipment and related resources. Part II will contract a future training trailer use state-wide. OEHS is currently finalizing Request for Quotation draft for Part I. It is anticipated this work will be awarded in early 2008.
2. Developing an ID card (w/photo & scan information) system for water operators. Completed a Request for Information and received good information from multiple vendor responses September 21, 2007. Current Request for Quotation submitted to state purchasing for review. It is anticipated this work will be awarded in early 2008.
3. Developing a Water Operator Career Awareness Campaign to act proactively and efficiently in addressing the operator shortage issue. Have identified and will invite key individuals to identify and establish a committee to determine the best

direction and approach to addressing the operator shortage issue and raise overall awareness of the operator profession and drinking water industry.

OEHS plans to complete approved activities.

## Appendix E – Source Water Protection Reporting Form, FY 2007

Percent of CWSs or SWAs for CWSs with Source Water Protection Strategies in Place and Being Implemented				
State: West Virginia				
Level of Implementation	Strategy in Place and Being Implemented		Substantial Strategy Implementation	
(Columns or rows do not need to add to 100%)				
	CWS/SWA for CWS	Population	CWS/SWA for CWS	Population
Ground water-based	67%	82%	6%	34%
Surface water-based	51%	70%	27%	56%
Total	58%	73%	18%	52%

Percent Change in CWSs or SWAs for CWSs Achieving Substantial Implementation of Source Water Protection Strategies		
State: <b>West Virginia</b>		
	Substantial Strategy Implementation	
	CWS/SWA for CWS	Population
State total (current year)	18%	52%
Percent change **  $\frac{\text{current year} - \text{previous year}}{\text{first year}}$		
**EPA will calculate the percent change based on the previous and first years' data reported by the State.		

**\* September 2007 reported to be consistent with Source Water Protection Report submitted to EPA. Will update for the EPA SWAP report in September 2008.**